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MASS. TC1.2: E076/phase 1

Deloitte & Touche

The Commonwealth of Massachusetts

Executive Office of Transportation & Construction

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EOTC Financial Advisory Assistance

Phase I: Deliverables and Supporting Materials

April 10, 1992

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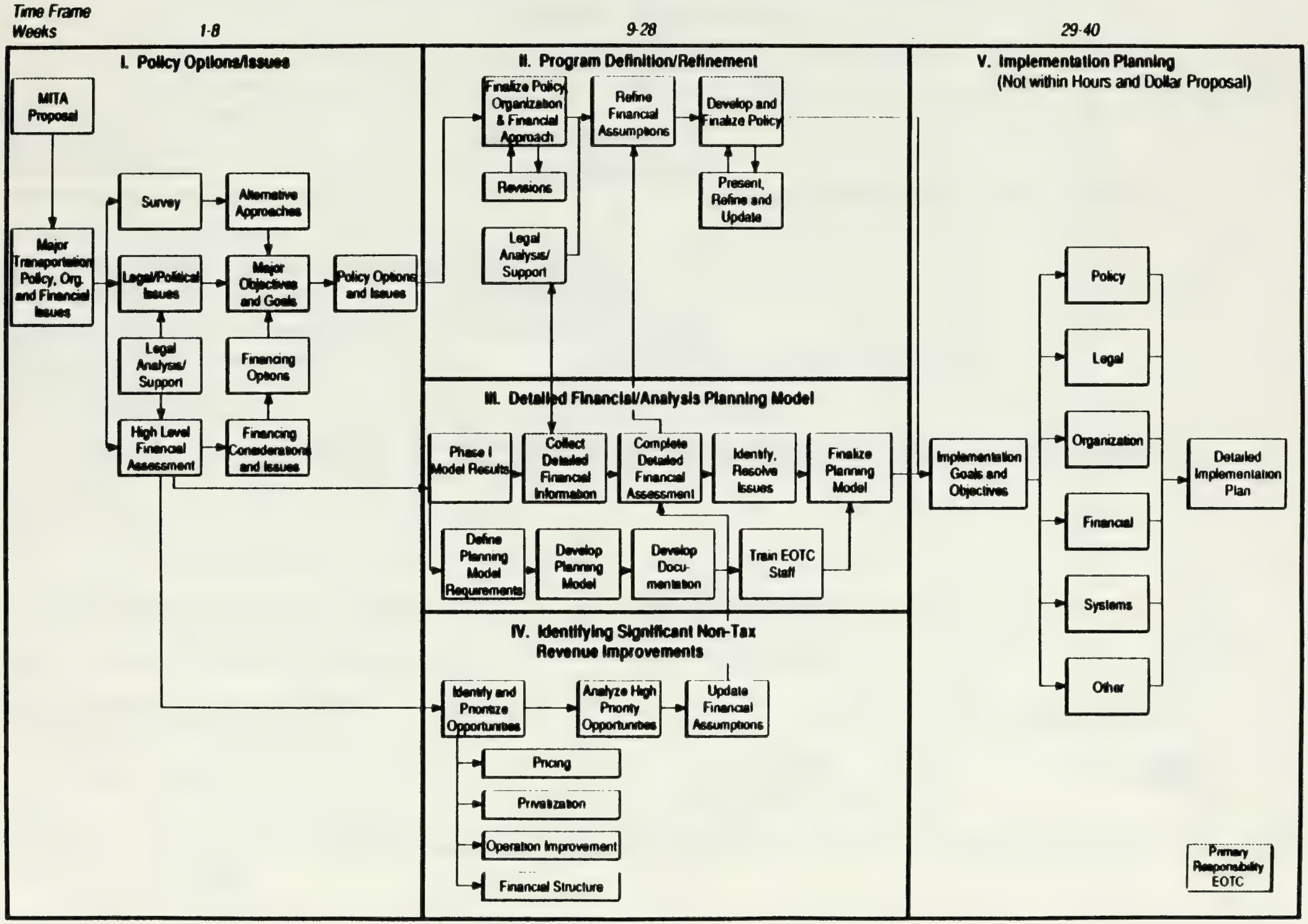
The information contained in this document is the work product of an on-going engagement of Deloitte & Touche to provide financial advisory assistance to the Commonwealth of Massachusetts, Executive Office of Transportation and Construction (EOTC). It is composed of various presentations, financial analysis, and backup information supporting the overall work effort. Due to the evolving nature of the assignment, this information is subject to misinterpretation without an explicit understanding of the context in which it was developed and presented.

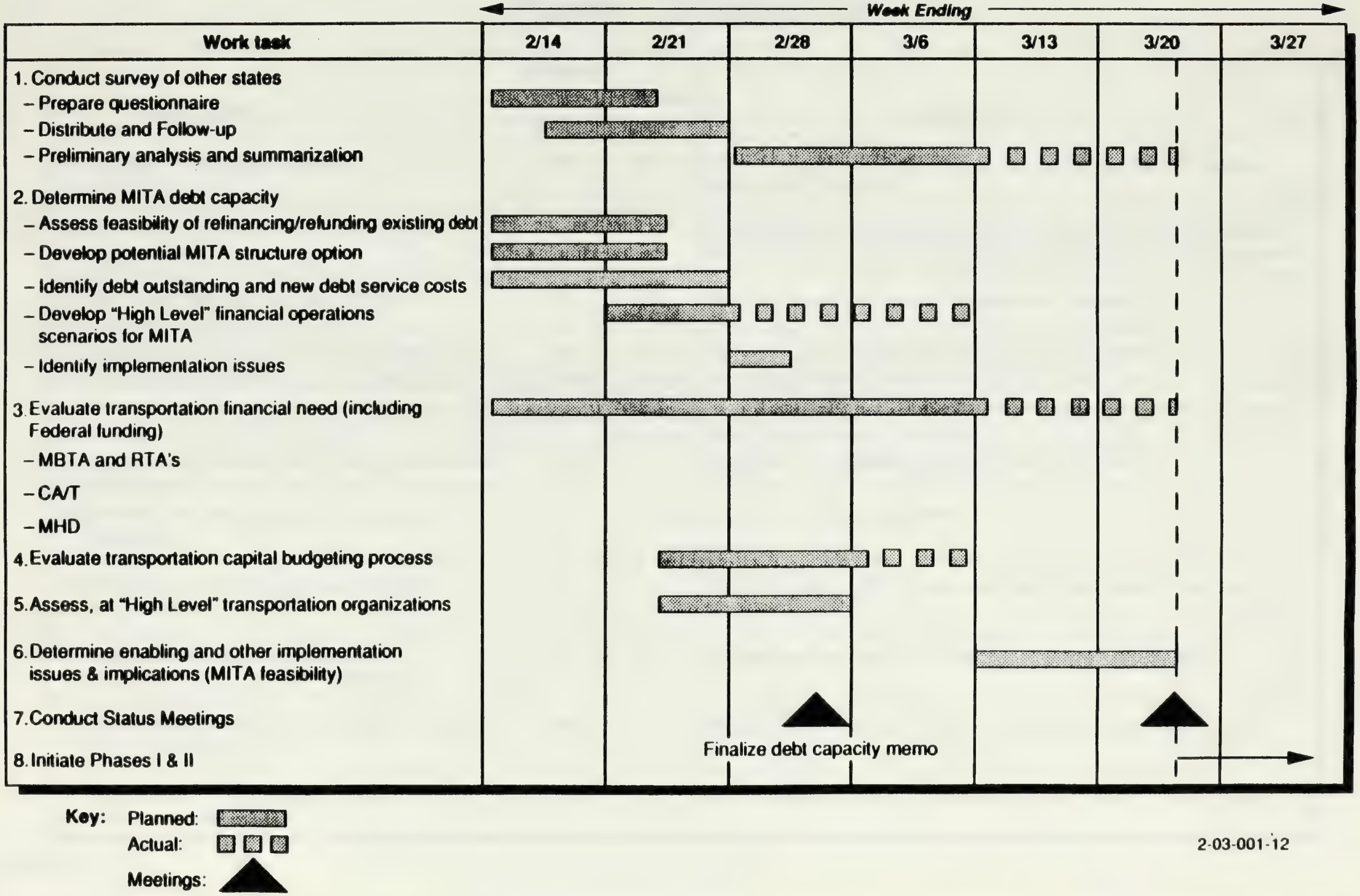
This document, and the information herein, is strictly confidential and was prepared for the express use of the EOTC or parties it designates. If you have any questions regarding this work product, please contact Mr. Doug McCracken at (617) 261-8600 or Mr. Reynold Mooney, Deloitte & Touche, at (617) 261-8515.

Proposed Project Approach


Time Frame Weeks
1-8
9-28
29-40
I. Policy Options/Issues
MITA Proposal
Major Transportation Policy, Org. and Financial Issues
Survey
Alternative Approaches
Legal/Political Issues
Major Objectives and Goals
Policy Options and Issues
Legal Analysis/ Support
Financing Options
High Level Financial Assessment
Financing Considerations and Issues
II. Program Definition/Refinement
Finalize Policy, Organization & Financial Approach
Refine Financial Assumptions
Develop and Finalize Policy
Revisions
Present, Refine and Update
Legal Analysis/ Support
III. Detailed Financial/Analysis Planning Model
Phase I Model Results
Collect Detailed Financial Information
Complete Detailed Financial Assessment
Identify, Resolve Issues
Finalize Planning Model
Define Planning Model Requirements
Develop Planning Model
Develop Documentation
Train EOTC Staff
IV. Identifying Significant Non-Tax Revenue Improvements
Identify and Prioritize Opportunities
Analyze High Priority Opportunities
Update Financial Assumptions
Pricing
Privatization
Operation Improvement
Financial Structure
V. Implementation Planning
(Not within Hours and Dollar Proposal)
Implementation Goals and Objectives
Policy
Legal
Organization
Financial
Systems
Other
Detailed Implementation Plan
Primary Responsibility EOTC

EOTC Financial Advisory Assistance Project

Phase I Workplan



EOTC Financial Advisory Assistance
Phase I Workplan

Sub Tasks	% Comp This Phase	Deliver-able	Activity Detail
1.a Identify existing highway capital projects and cash requirements	40%	D.2	Percent complete - reviewed highway capital program and turnpike critical needs study, Tobin Bridge
1.b Review and evaluate revenue sources for each highway project	35%	D.2	Percent complete - Identified federal funding 105 five year programs and MHD GO funding through State Treasurer; reviewed MTA tolls and third harbor tunnel
1.c Build cash flow model for highway projects	40%	D.2	Percent complete - "High level" assessment and cash flow
1.d Determine highway funding adequacy by project	25%	D.2	Percent complete - Considered MITA debt capacity available
1.e Recommend alternative highway funding techniques	25%	D.2	Percent complete - Considered alternative turnpike structure and SO for MMD
2.a Survey states with similar fiscal issues to Massachusetts	100%	D.1	In progress - 10 responses in process of being summarized
2.b Evaluate other state financing techniques for local applicability	80%	D.1	In progress - To be completed with survey
2.c Recommend appropriate financing methods for implementation	67%	D.4	Percent complete - MITA Proposal and Public Transportation Trust Fund
3.a Review and evaluate capital replacement and expansion requirements of MBTA and RTAs	35%	D.2	Percent complete - Worked with MBTA to determine realistic need
3.b Review and evaluate sources and uses of operating funds for MBTA and RTAs	35%	D.2	Percent complete - reviewed historical operations at MBTA and RTAs and projected preliminary future scenarios
3.c Quantify amounts and timings of funding shortfalls (MBTA and RTAs)	10%	D.2	Percent complete - High level comparison between funding and debt capacity

EOTC Financial Advisory Assistance
Phase I Workplan

Sub Tasks	% Comp This Phase	Deliver-able	Activity Detail
4.a Evaluate current capital budget effectiveness	25%	D.10	Percent complete - Reviewed existing capital budgeting programs
4.b Identify current agency roles and organization	0%	N/A	—
5.a Assess authority capital structure, capacity requirements and future plans	0%	N/A	Moved ahead with MITA concept - Public Transportation Trust Fund, bond refundings, and related issues
5.b Recommend ways to integrate financial information from authorities for EOTC planning and control	0%	N/A	—
6.a Develop a system to accurately project cash flow requirements	0%	N/A	Basis for detailed planning models developed to support Phase I high level assessment
6.b Develop a model for EOTC tracking of capital spending progress	0%	N/A	—
7.a Examine operations and maintenance cost projections of CA/T	35%	D.2	Percent complete - Reviewed Lazard Frere's report and initiated a reassessment by CA/T management
7.b Analyze funding alternatives for meeting CA/T operating and maintenance requirements	25%	D.4	Percent complete - Identified new CA/T funding "gap" and integrated with MITA debt capacity analysis
8.a Evaluate privatization proposals	0%	N/A	—

N/A: Not applicable to Phase I

Deliverables By Project Phase

	Phase	Estimated Hours By Deliverable
1. Survey/Policy Issues and Alternatives	I	200
2. High Level Financial Assessment	I	830
3. Detailed Financial Assessment	III	800
4. Financial Planning and Analysis Model	I, II	325
5. Financial Planning and Analysis Model	III	265
6. Financial Planning and Analysis Model Training	III	80
7. Non Tax Revenue Improvement Assessment	IV	1,030
8. Program Definition Support	II	200
9. Implementation Planning Support	V	n/a
10. Facilitation and Analytical Support – Policy Department – Financial Analysis – Implementation Planning	I, II, III, IV, V	415
		4,145

☐ Deliverables completed and/or initiated during Phase I

Financial Assessment Contents

- Overview of Options
- MITA Option Analysis
  - Description and Financial Impact of Scenarios
  - State Budget Overlay
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- Revised Option: MITTF Scenario

Preliminary Overview of Structural Options

Attributes	"Do Nothing" Status Quo	Limited Integration - Coordinate Boards	Partial Refunding: Integrate MassPike	MITA Trust Fund: Phase-In Approach	MITA Trust Fund
Credit structure - independent Special Obligation authority to provide incremental capacity of Commonwealth of MA full faith and credit	GO	GO	GO, Potentially Partial SO	SO For New Debt, Old Maintained As Is	SO, Independent Credit
Equitable funding structure for MBTA including "forward funding"	No	No	Yes	Liability Could Remain with State	Yes
MassPike - Degree of integration into MITA	Independent	Excess Surplus Usage for Other Highway	Integrated	Integrated Over Time	Integrated
MassPort - Degree of integration into MITA	Independent	Excess Surplus Usage for Other	Excess Surplus Usage for Other	Excess Surplus Usage for Other	Excess Surplus Usage for Other
Ability to manage pricing "intermodally"	Limited	Limited	Moderate	Moderate/High	Full Pricing (excluding MassPort)
Ability to coordinate/integrate capital planning and spending	Limited	Limited	Moderate	Moderate/High	High
Ability to reduce/control rate of growth of operating costs (e.g., through overhead consolidation, etc.)	Limited	Limited	Moderate	Moderate	High
Degree of coordinated Board control - "cross population"	Limited	Independent Boards, Cross-Populated	MassPike Board Subsumed, Others Cross-Populated	MITA Board Established Over Time	Single MITA Board

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MITA Option Analysis
Planning Scenarios
Scenario Assumption Comparison

Categories	Basecase	Basecase (Variation 1)	(1) Constrained Operating Costs	(2) User Fee Increases	(3) General Fund Elimination	(4) Optimistic	(5) Optimistic Revenue Only
Taxes and Assessments	• Percent Cigarette Tax Currently to Highway Fund • 100% Motor Fuel Tax • 100% Registry Fees	—	—	—	• Incorporates Motor Vehicle Sales Tax	• Scenario (3) assumption	• Scenario (3) assumption
Local Assessment	• $134 Base (includes $20 proposed reduction) growing 2.5% per annum	• $20 of local assessment refunded to Cities and Towns. Total equals $114	—	—	—	—	—
Operating Revenues	• Increase due to ridership growth and other income growth • No fare or toll increases	—	—	• Toll/Fare increases assumed (see following page)	—	• Scenario (2) assumption	• Scenario (2) assumption
State General Fund	• Matches local assessment 50 : 50	• State match reduced $20 to retain 50 :50	—	—	• General Fund match eliminated	• Scenario (3) assumption	• Scenario (3) assumption
Operating Expenses	• Transit and Highway grow at 7% per annum • Operating efficiencies as identified in Morgan Stanley report (1)	—	• Growth in Transit and Highway assumed to be managed to 4% p.a. • Public Safety costs taken by General Fund	—	—	• Scenario (1) assumption	—
Debt Service	• MBTA refunding all short and long term obligations and COPS to Achieve "Forward Funding"	—	—	—	—	—	—
New Debt	• Assumes lien on Gross Revenues and coverage consistant with achieving an "A" rating • Level debt service, 30 year notes at 7.5% (incorporating issuance cost)	—	—	—	—	—	—

(1) "A Financial Restructuring Plan for the MBTA", Morgan Stanley, 1991

MITA Option Analysis Planning Scenarios

User Fee Assumptions [1]

- MBTA Basic Fare to $1.00 in 1994, $1.25 in 1996
- Callahan/Sumner Tunnel toll to $1.30 in 1993, $1.70 in 1995
- MassPike nominal toll to $1.50 in 1993, $1.70 in 1995
- Tobin Bridge toll to $1.30 in 1993, $1.70 in 1995
- No assumptions regarding congestion pricing currently incorporated

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(1) *Applied to scenarios 2, 4 and 5*

MITA Option Analysis Planning Scenarios

Financial Results by Scenario ($ Billions)

Cumulative - 5 Year	**Basecase**	**Basecase (Variation 1)**	**(1) Constrained Operating Costs**	**(2) User Fee Increases**	**(3) General Fund Elimination**	**(4) Optimistic**	**(5) Optimistic Revenue Only**
Income	8.77	8.56	8.77	9.15	9.14	9.51	9.51
Operating Expenses	5.92	5.92	5.29	5.92	5.92	5.29	5.92
Debt Service	2.50	2.50	2.55	2.84	2.52	2.55	2.55

New Debt Issued	**2.40**	**2.40**	**3.00**	**3.00**	**2.70**	**3.00**	**3.00**

Source: See MITA Debt Capacity Model Appendix for detailed yearly cash flow statements.

Outstanding Indebtedness Summary
($ Millions - Most Recent Reported Year End)

	Short Term	Long Term
MBTA:		
General Transportation system Bonds		$1,750.5
Boston Metropolitan District Bonds		60.7
Certificates of Participation		110.5
Current Expense (Series B)	$175.0	
Current Expense (Series D & E)	160.0	
Commercial Paper	22.0	
Subtotal	$357.0	$1,921.7
MASSPIKE:		
1962 Series A, 1986 Improvement Revenue Bonds		152.2
1990 Tunnel revenue Bonds (MIFA)		46.6
Subtotal		$198.8
MASSPORT:		
1978 Series		260.7
1985 A & B Series, 1988 Series A, 1990 Series A		198.7
Subtotal		$459.4
MASSACHUSETTS HIGHWAYS:		
State General Obligation Indebtedness		2,506.2
OTHER STATE DEBT ASSOCIATED WITH FUNDING MBTA "NET COST OF SERVICE"	429.0	
TOTAL	$786.0	$5,086.1

Forward Funding of the MBTA and RTAs

At present:

- The Commonwealth is obligated by statute to fund the operating deficit and annual debt service payments in arrears. For example, in Fiscal Year (FY) 92, the State budgets for and pays its share of the deficit (net cost of service) incurred in Calendar Year (CY) 1990. Similarly, local assessments on the communities within the MBTA service area pay their share of the deficit for CY 1990.

- In Calendar Year 1992, the net cost of service is estimated to be approximately $400 million. An estimated $280 million of this amount is paid for by the Commonwealth and the balance is assessed on the cities and towns.

- The Commonwealth's share of the MBTA's debt service and other fixed charges is estimated to be approximately $135 million in SFY 92 (this amount is in addition to the net cost of service reimbursement).

Forward Funding of the MBTA and RTAs

At present (continued):

- Due to the retrospective nature of the deficit funding mechanism, the MBTA relies upon short-term borrowings - issued both by the MBTA and State Treasurer - to finance the operating shortfall prior to reimbursement. The FY 92 debt service on these short-term borrowings is estimated at $38 million, which reflects a relatively low interest rate environment for such borrowings. A portion of the short-term notes are annually converted to long-term debt during each successive reissuance of notes. As a result, a portion of the short-term borrowings becomes part of the MBTA's long-term outstanding debt structure.

Forward Funding of the MBTA and RTAs

To eliminate the need for these financings:

- The MBTA would be required to funnel their operating deficits on a current year basis from revenues received by the State in the same year as the deficit is incurred. This conversion would be consistent with common practice in the industry and is termed "forward funding."

To accomplish "forward funding," in the current fiscal year (i.e., by July 1, 1992) two steps are needed:

1) Extinguish outstanding and anticipated net-cost-of-service obligations

   - Fully fund MBTA net cost of service for the calendar year 1991 and for the period January 1 - June 30, 1992.
   - Fund the State share of commuter rail service for the period July 1 - June 30, 1992

Forward Funding of the MBTA and RTAs

2) Retire or convert outstanding short-term borrowings

- Currently outstanding MBTA notes ($357 million) and State advances to the MBTA ($375 million) should be retired (if funds are available) or converted to long-term debt.

The cost of extinguishing current net-cost-of-service obligations is estimated at approximately $786 million.

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MITA Planning Scenario State Overlay

Income

($ Millions - SFY 1993 Base)

	House 1 Funding	MITA Transportation Trust Fund	Difference	Explanation
TAXES AND ASSESSMENTS:				
Motor Fuel Tax	$ 532	$ 540	$ 8	• 1.5% to Inland Fisheries, Other
Cigarette Tax	–	25	25	• Highway Fund allocation back into General Fund in House 1
Registry and Other Fees	411	411	–	–
Other (from Highway Fund)	58	15	(42)	• House 1 assumes a MITA "benefit"
Local Assessments	134	134	–	
OPERATING REVENUES:				
Tolls (THT & Tobin Bridge - Net)	0	0	–	–
Transit Operations	190	190	–	–
Federal Operating Assistance	27	27	–	–
Turnpike Revenue	–	157	157	• MITA incorporates Turnpike - out of House 1 scope
Mass Port (Net)	–	20	20	• MITA coordinates with Massport and recovers part of surplus - Out of House 1 Scope
State General Fund (Local Match)	–	134	134	• Assumes General Fund match of local share - Not in House 2
Interest Income	–	10	10	• State interest income in General Fund and not incorporated in Highway Fund specifically
TOTAL INCOME	$1,352	$1,663	$312	

Source: House 1 and MITA incremental debt capacity analysis.

MITA Planning Scenario State Overlay

Expenses (Cash)

($ Millions - FY 1993 Base)

	House 1 Funding	MITA Transportation Trust Fund	Difference	Explanantion
EXPENSES:				
Administration (MITA)	–	$ 5	$ 5	• Assumes some overhead cost to managing MITA
OPERATIONS:				
Transit	$633	633	–	–
Highway	114	189	75	• Assumes Turnpike operating costs - Not in House 1
Registry	38	38	–	–
Public Safety	85	85	–	–
Operating Efficiencies	–	–	–	–
Pension & Other	96	96	–	–
Local Aid (Ch. 90)	41	41	–	–
Debt Service:				
MBTA (Long Term)	220	190	(30)	• Reduction due to refinancing existing debt
MHD	218	130	(88)	• Reduction due to refinancing existing debt
Mass Pike	–	37	37	• Incorporates refinance & Turnpike debt service in MITA - Not in House 1
TOTAL EXPENSES	$1,445	$1,444	$(1)	
CASH SURPLUS/(DEFICIT)	(94)	$ 219	$313	
OTHER: Debt Service on MBTA Short Term (General Fund versus "Forward Funded")	40	80	(40)	
TOTAL CASH (SURPLUS) DEFICIT IMPACT	$(134)	$139	$273	

Source: House 1 and MITA incremental debt capacity analysis

MITA Planning Scenario State Overlay

Sources and Uses of Funds

($ Millions - SFY 1993 Base)

SOURCES OF INCREMENTAL FUNDS:		
State General Fund Match	$134	
Refunded Debt Service (MBTA & MHD)	118	
Refunded Debt Service (Mass Pike) (1)	(9)	
Remainder of Gas Tax	8	
Cigarette Tax	25	
Subtotal	$276	
Access to Mass Pike Surplus (2)	$ 82	
Operating Efficiencies (Potential Impact) (3)	55	
Access to Mass Port Surplus	20	
Interest Income	10	
Subtotal	$157	
TOTAL SOURCES OF INCREMENTAL FUNDS		$433
USES OF INCREMENTAL FUNDS:		
MITA Administrative Costs	5	
House 1 "MITA Contribution" Elimination	42	
Incremental Debt Service to "Forward Fund" MBTA	(40)	
TOTAL USES OF INCREMENTAL FUNDS		7
TOTAL INCREMENTAL AVAILABLE FOR CAPITAL PROJECTS		$426

Source House 1 and MITA incremental debt capacity analysis

(1) Current Mass Pike debt service of $28 million versus estimated refinanced debt service of $37 million
(2) All Mass Pike excess revenues incorporated in MITA
(3.) Ultimate impact anticipated - after FY 1993

MassPike Financial Implications
($ Millions - FY 1993 Base)

Mass Pike Revenue (Toll & Other)	$157.0	
Operating Expenses	75.0	
Net Revenue	82.0	
New Debt Service (1)	51.0	
Annual Incremental "Surplus" Available After Funding of Mass Pike Capital Program	$31.0	
Estimated 10 Year Capital Spending Requirement "Critical Needs for the 90's"		600.0
Estimated New Debt Service to Fund Program*		51.0

Source: MassPike annual reports and "Critical Needs for the 90's" study

(1) Assumes 30 year notes at 7.5% level payment principle and interest

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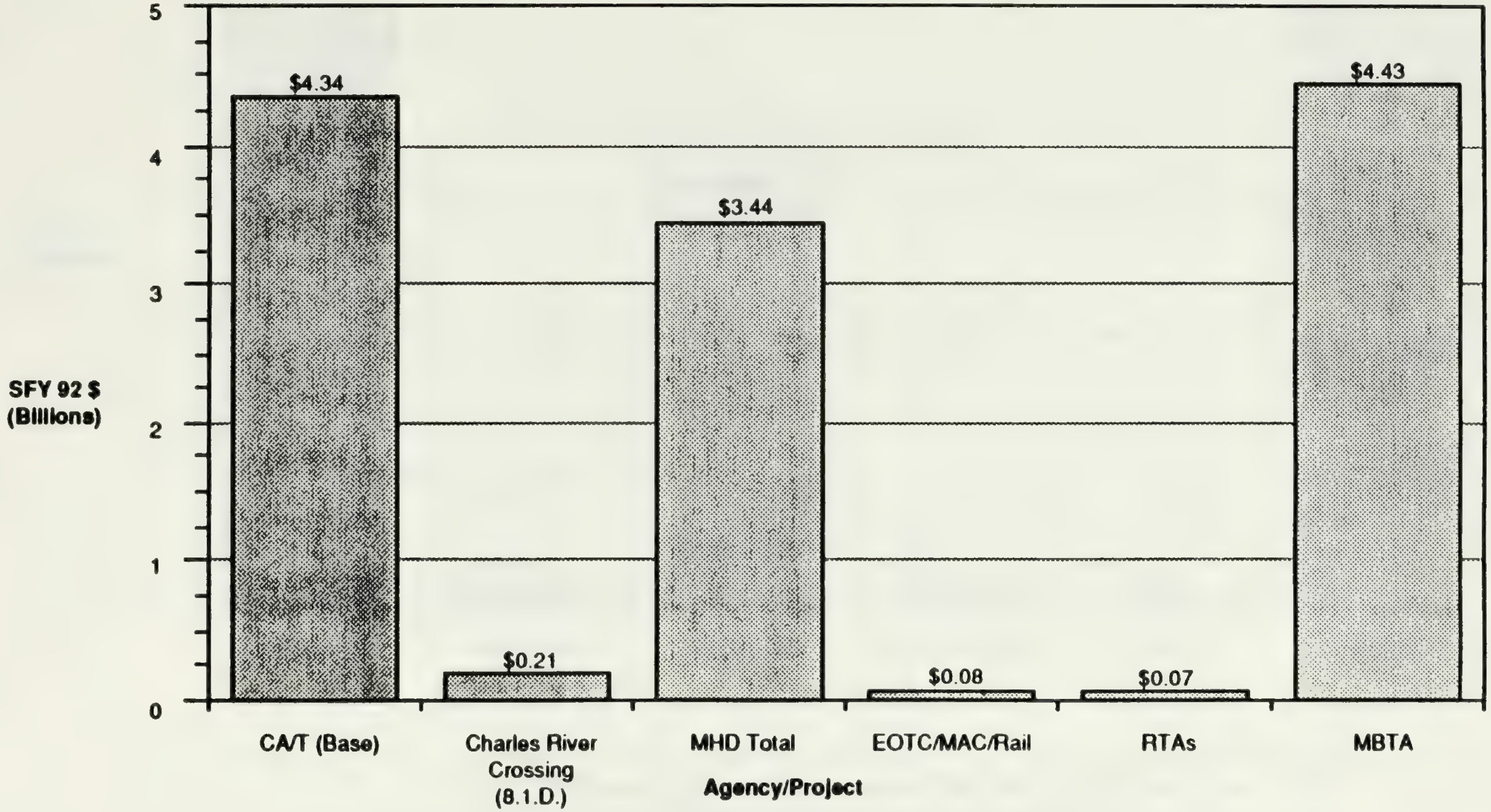
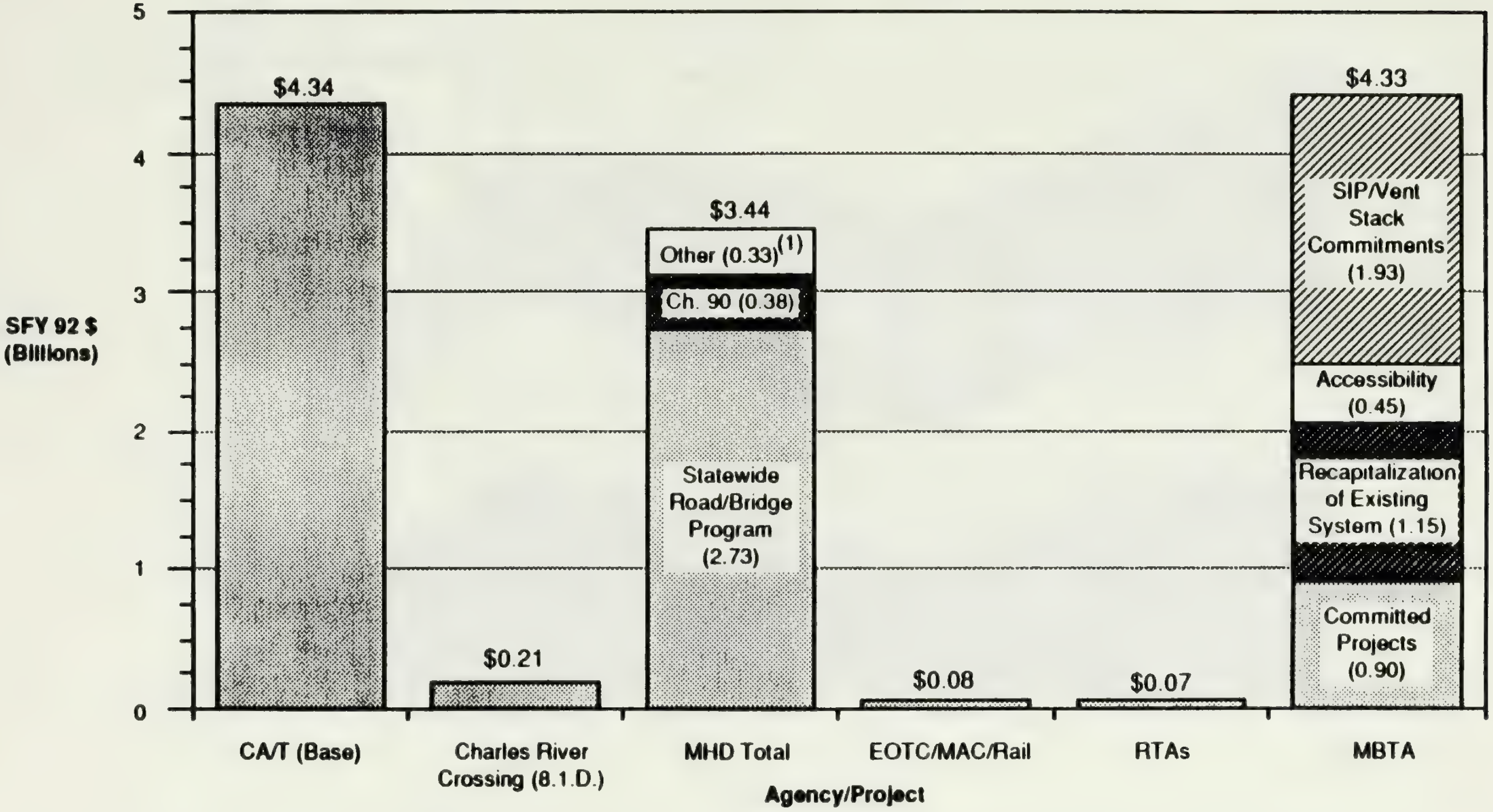
Transportation Capital Needs
(SFY 92 - SFY 97)



The total projected capital need is approximately $12.57 billion over 6 years.

Source. Internal EOTC Agency and Departmental Data

Transportation Needs by Category (SFY 92 - SFY 97)

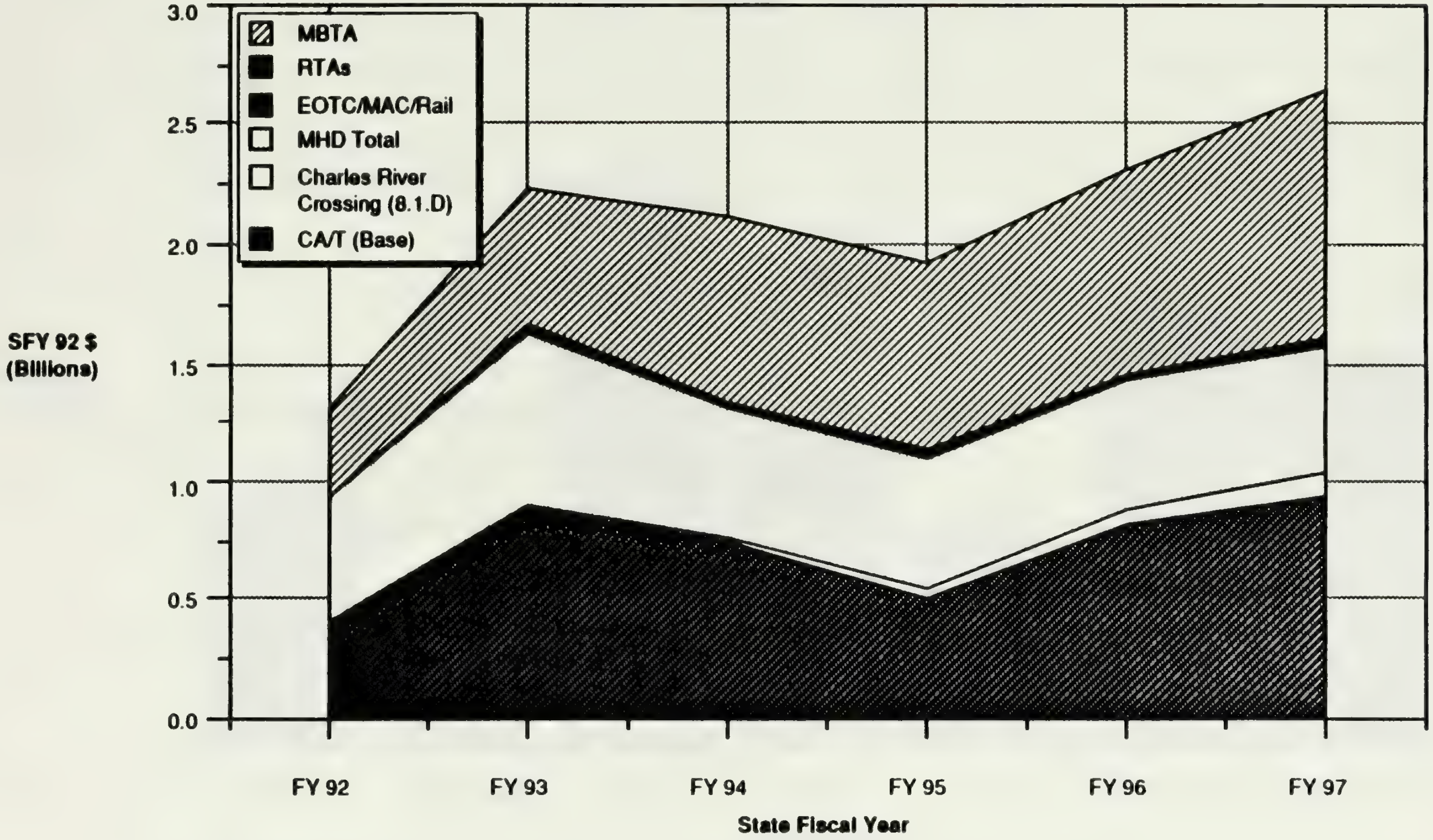


SIP and Accessibility commitments for the MBTA exceed Recapitalization Requirements for the system.

Source: Internal EOTC Agency and Departmental Data

(1) *"Other" needs in MHD Total include Design, Soft Costs, Right-of-Way, and Judgments*

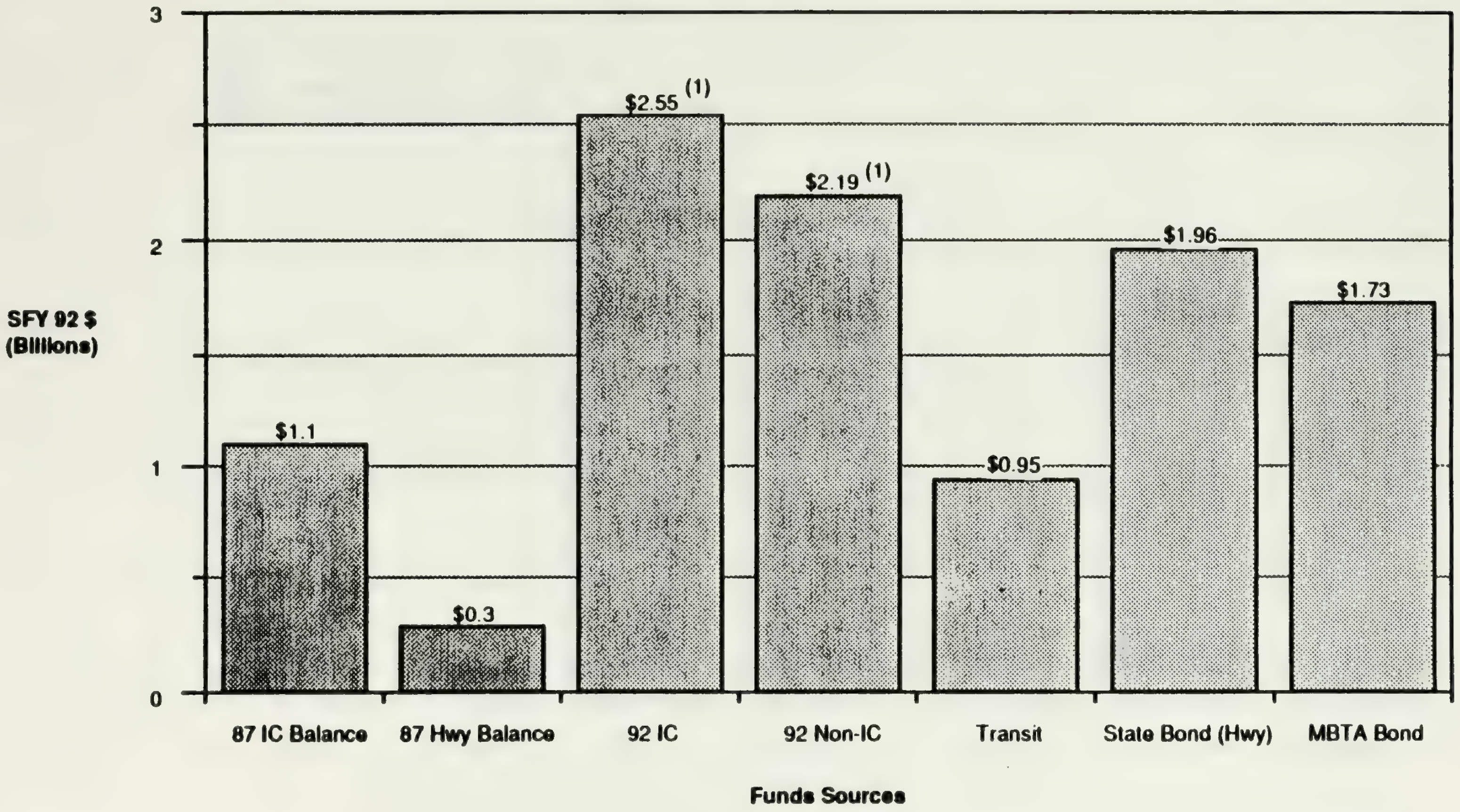
Transportation Capital Needs Cash Flow
(SFY 92 - SFY 97)



- Implementing Charles River Crossing 8.1.D. extends Base CA/T project beyond SFY 97, causing a dip in spending in SFY 95
- Peak in SFY 93 due to start up of key large CA/T contracts and spending associated with previous MHD advertising programs

Source Internal EOTC Agency and Departmental Data

Transportation Capital Resources (SFY 92 - SFY 97)

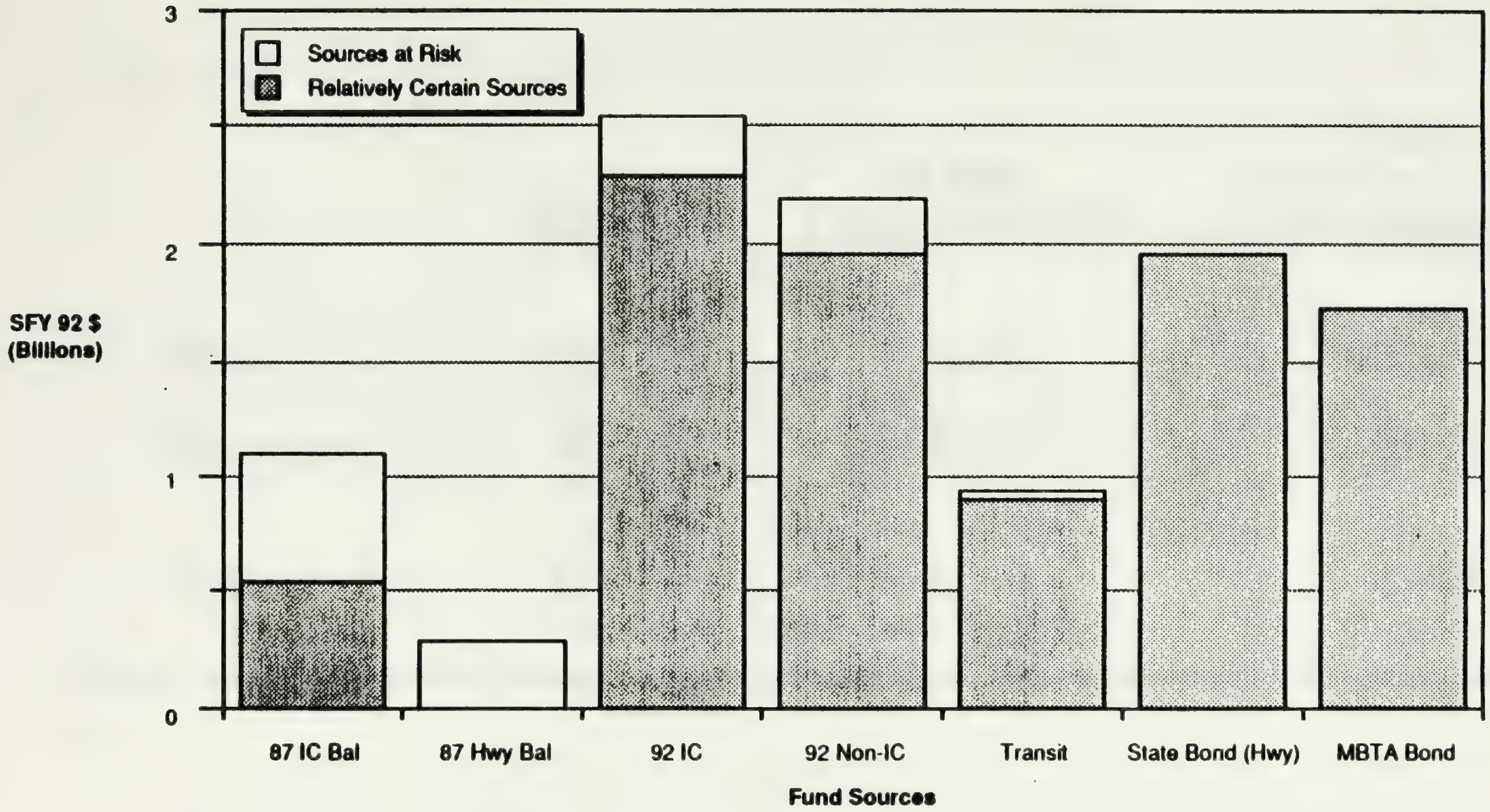


Total Capital Resources are approximately $10.78 Billion

Source Internal EOTC Agency and Departmental Data

(1) Federal Fiscal Year (FFY)

Transportation Capital Resources by Category (SFY 92 - SFY 97)



The Sources at Risk ($1.37 billion total) include:

- *$0.55 m (1987 Bill IC) and $0.30 m (1987 Bill Highway) that are authorized but can not be obligated*
- *10% of the 1992 IC, 1992 Non-IC, and Transit (Section 3 only), assuming that only 90% of the authorized amounts will actually be appropriated*

Source. Internal EOTC Agency and Departmental Data and ISTEA

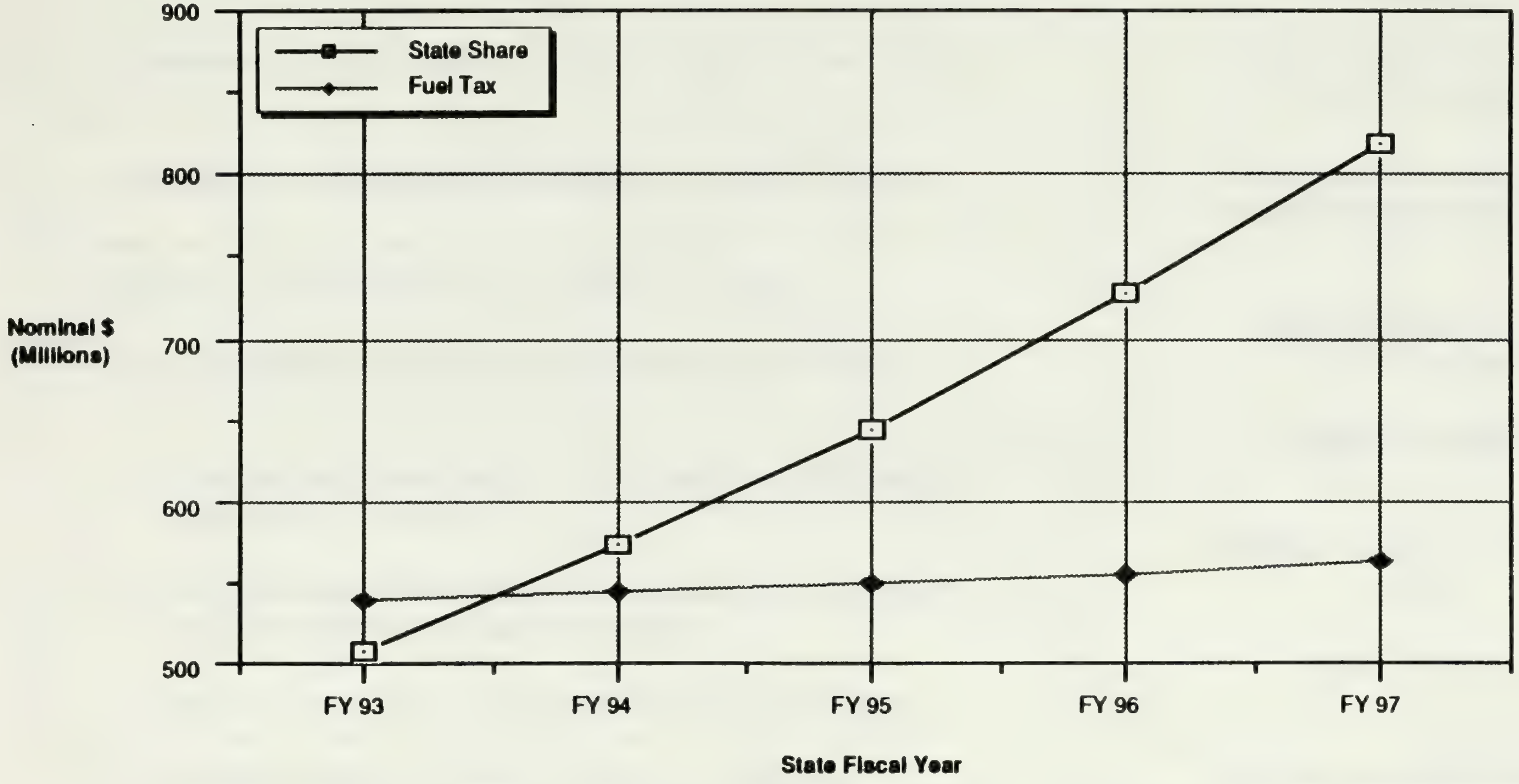
Capital Needs and Resources Summary

	Baseline	At Risk Resources Lost	At Risk Resources Lost & Need Inflation (1)
Needs	$12.6 B	$12.6 B	$13.9 B
Resources	$10.8 B	$ 9.4 B	$ 9.4 B
"Gap"	$ 1.8 B	$ 3.2 B	$ 4.5 B

Source: Internal EOTC Agency and Departmental Data and ISTEA

(1) Assumes inflation at 3.5% per annum

State Share of MBTA Operating Expenses Compared to Fuel Tax Revenue (SFY 93 - SFY 97)



The Motor Fuel Tax annual growth rate is 1% -- the State Share of MBTA Operating Expenses (including State Share of Net Cost of Service and Contract Assistance for Debt Service) annual growth rate is 13 % (based on average annual growth from FY 86 to FY 92)

Source: Historical MBTA operating performance and State's motor vehicle fuel tax projection.

Closing the Gap

A MITA Perspective

ITEM	IMPACT
1. Incremental debt capacity available to MITA Trust Fund	Approximately $1.0 Billion "truly" incremental
2. Integrated planning and prioritization of capital needs	Less spent by year, more effective capital spending
3. Develop "Intermodal" pricing strategy/policy:	
a. Coordinated user fees for highways into Boston	Estimated $50-$100 Million/yr (net)
b. Tolls at state entry points - contribution for usage by out-of-state commuters	Higher revenues
c. Increase transit ridership - drive clean air attainment and preservation of Federal funding	Maintain access to Federal funds
d. Adjust transit fares in line with national averages	Higher revenues
4. Coordinate access to Federal funds - maximize contribution/allocation of funds and credibly demonstrate ongoing needs	Maximize Federal dollars available
5. Reduce cost/manage cost growth of transportation through consolidation of overhead functions	Reduce operating costs

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CONFIDENTIAL MEMORANDUM

DATE: April 7, 1992

RE: **A Revised Massachusetts Intermodal Transportation Scenario**

This memo outlines the current planning scenario EOTC is using for the MITA legislation to be drafted. The outline identifies a list of the major organizational, governance, and financial issues which will be addressed.

Organizational Structure

1. Maintain the concept of a Massachusetts Intermodal Transportation Trust Fund (ITTF).

   a. The ITTF would receive motor fuel tax, automobile sales tax, registry fees, local assessments, certain federal funds and potentially some toll revenue. The revenue "package" must be configured in a manner consistent with the operating, maintenance and capital needs of state highways, the MBTA and other line agencies responsible to the EOTC.

   b. ITTF will have the capability and authority to issue bonds secured by revenue dedicated to the fund. These bonds would become obligations of the Trust Fund and would not, in any manner, become general obligations of the State of Massachusetts.

   c. It is envisioned that the ITTF issue debt to "forward fund" the MBTA and for new obligations related to highways and transit. Existing long term highway and transit debt will remain obligations of the state. MassPort and MassPike maintain their independent bonding authority. The ITTF may also elect to have certain subfunds created for the purpose of tracking the collection and disposition of specific types of revenue.

2. MassPike and MassPort will remain as they are currently constituted (except for the change outlined in item #3). However, each authority will assume expanded responsibility to share in the financing of capital projects either contiguous to or integral to their operations. Examples of these responsibilities include, in the case of the MassPike access roads within a three mile radius of the Turnpike itself. For MassPort, potential projects might include the Blue Line station which provides a terminus at Logan International Airport, the Route 1A improvements, state share of the Third Harbor Tunnel, and other transportation projects which improve mobility to and from the airport or port properties.

Governance

3. The Secretary of EOTC, in addition to his current duties and responsibilities, will sit on the Board of Directors of MassPort and MassPike.

4. There will be the establishment of an Intermodal Transportation Trust Fund Commission which will govern the overall policies and projects to be funded from the Trust Fund. The Commission will be chaired by the Secretary of EOTC and may consist of, for example, the Secretary of Administration and Finance, the Secretary of Environmental Affairs, a representative of the MPO, the Chairpersons of the MassPike and MassPort Boards, and other members to be determined.

5. Within the context of the Intermodal Transportation Trust Fund Commission, the EOTC will assume stronger coordination and oversight responsibilities with respect to long and short-range capital planning and spending priorities by all agencies including MassPike and MassPort. These responsibilities may include reporting periodically to the Commission on the degree to which capital expenditure plans and projects are coordinated. Other responsibilities include ensuring that priorities and projects are consistent with State and ISTEA objectives of intermodal coordination and clean air requirements, and leveraging local and state resources to attract federal funding (including maximizing access to STP discretionary funds, etc.)

Financial Management

6. In addition to its oversight and reporting responsibilities, the Intermodal Transportation Trust Fund Commission will have responsibilities to establish consistent and equitable toll and transportation pricing policies. These responsibilities may include establishing toll rates for the Callahan and Sumner Tunnels, Third Harbor Tunnel, Tobin Bridge, the Turnpike, as well as any additional toll facilities that may be implemented. The Commission would have the authority to place a surcharge on all tolls necessary to achieve intermodal coordination in Boston. This would include surcharges on MassPike tolls, and on other entities as required. This surcharge will flow back to the ITTF to support financing for other capital programs (both highway and transit).

   This responsibility would also extend to the ability to establish toll facilities on currently untolled major arterials in and around metropolitan Boston in a manner to effectively implement a consistent regional congestion pricing approach to transportation management.

The legislation will need to address the following issues related to Intermodal congestion pricing :

a. establish legal basis for assuming tolling authority and revenue flow issues to ITTF.

b. provide mechanism to implement an "Environmental Surcharge" - needed to coordinate/prevent unilateral system adjustments.

c. Must be consistent with enabling the state to maximize access to all ISTEA funding.

7. The ITTF will issue long-term bonds in an amount sufficient to retire any short-term obligations and reimburse the state and local shares of MBTA net-cost of service amounts for calendar 1991 and for January 1 to June 30, 1992, the RTA's net cost of service for fiscal year 1991-92 and any other amounts necessary to establish the MBTA on a current year funding basis. This "forward funding" bond will be secured by a net pledge (All ITTF Revenues less the operating revenues of the MBTA and Federal grants) of the Trust Fund.

8. Existing long-term general transportation system bonds previously issued by the MBTA, and secured by the Commonwealth, will remain general obligations of the Commonwealth.

9. MassPike/MassPort would deposit annual "surplus" in a special subfund of the ITTF. Secured by this, the ITTF issues bonds to fund the agency's capital programs (including contiguous or integral project commitments).

10. In order to achieve the goals outlined in point #2 above, the existing and outstanding MassPike revenue bonds will be advance refunded for the purpose of replacing the current Supplemental Trust Agreement with a new indenture which would allow surplus revenues, as defined by residual revenues after operating debt service and appropriate maintenance costs are paid, to be used for capital purposes consistent with item #2 above.

11. Setting Registry fees - The ITTF Commission would be given the authority to set these fees.

12. Disposition of the Tobin Bridge - Transfer of the bridge would be accomplished through an asset sale to MassPike, the proceeds from which Massport would transfer to the ITTF or use to fund contiguous projects.

EOTC - Preliminary MITA Issues Identification

Policy

- Intermodal concept - How far have other systems *really* gotten?
- Implications on and integration with land use planning and environmental impact
- Capital planning, project evaluation and prioritization, rationalization, and management
- Goal trade-offs - what and how relative to maintaining an employment level, maintaining a service level, cost, etc.
- Performance measures - what are they?
- Defining/managing relationship with Federal (e.g., Clean Air Act compliance, etc.)
- Implementation of service changes - how communicated to public, timing, etc.

Operations

- Why exclude registry?
- Privatization - what, how aggregated, transactional approach
- "Seamless" operations - how and what degree of integration is advisable?
- Cross-operational linkages and standards - MIS, computer links, policies & procedures, other?
- "More with less" - potential for operational synergies and efficiencies
- "Customer satisfaction"

EOTC - Preliminary MITA Issues Identification
(Continued)

Finance

- What is the debt capacity of individual entities, combined MITA?
- Status of individual entities capital programs - scale of programs, performance relative to budget, likely completion, etc.
- Combined revenues and cash flow - what is it?
- Timing and impact of new revenue flows - CAT, intermodal services, other
- Funding approachs and impact of cash availability for debt service - "pay-as-you-go", debt financing
- Perception of a combined MITA credit - impact on risk, rating agencies reaction
- What are *real* financial commitments of agencies? Trust funding, reserves for projects, long term contracts, etc.

Legal

- Ability to access surplus funds - what are covenents and restrictions?
- Legal issues related to transition
- Enabling legislation requirements and "disabling" legislation of existing agencies (do they go away or remain as shells?)
- Legal structure/organization?
- Pension issues - implications on existing plans and going forward, other liabilities & prohibitions?
- Current litigation - what happens to existing legal actions against various agencies upon consolidation
- MITA agency status to accept Federal funds - agency of the state required?
- Any statutory limitations or restrictions on moving assets of existing agencies to a consolidated agency?

EOTC - Preliminary MITA Issues Identification
(Continued)

Organization

- How should/can governance of MITA work - board(s) structure, configuration, etc. - quasi-governmental board entity or department of the state?
- Degree of centralization desireable - planning, pricing, administration/support, treasury, other
- Interaction with MPO's/CTPS - degree of relationship with RTA's
- "Local support" - trade-off between economies from integrated and centralized versus perceived local responsiveness of small and decentralized
- Enhancing productivity and deriving synergy - "more with less"
- How to market changes to constituencies (consumers, riders, general public, others) - advantages of consolidation, intermodal benefits, enhanced service(s), etc.

Human Resources

- Union and civil service issues - contract requirements to integrating?
- Consolidating and normalizing pay grades, job classifications, benefit programs, workrules, fringes, etc.
- Managing the transition from personnel perspective
- Bargaining units for new entity and contracts structuring/ negotiation
- Implications of potential workforce reductions
- Degree of flexibility to change

Executive Office of Transportation and Construction, Commonwealth of Massachusetts

MITA Financial Advisory Assistance

Phase I: Survey Findings Summary

March 30, 1992

Survey Summary

1. **Adequacy of Funding**
   - Majority of respondents concerned about long-term funding
   - Even those with adequate resources worried about future expenditures outpacing revenues
2. **Increasing State/Local Revenue Sources**
   - Respondents with adequate funding took action to increase current sources or create new mechanisms
   - Traditional funding sources include increasing:
     - motor and diesel fuel taxes
     - vehicle registration fees
     - weight/distance truck taxes
   - Non-traditional financing mechanisms include:
     - joint development
     - private land donations
     - value capture
     - cross-border leasing

Survey Summary (continued)

3. **Privatization**
   - Virtually all respondents use private sector for contracting out, project development, or innovative financing
   - Many plan to increase use of private sector for cost savings
   - Contracting out is most widely used in:
     - highway and transit maintenance
     - security
     - provision of transit services
     - project feasibility studies
   - Public/private project development includes:
     - design, construct, operate
     - turnkey construction
     - joint development
     - impact fees
     - construction management

Survey Summary (continued)

4. **Organizational Restructuring**
   - All respondents have taken steps to:
     - better coordinate their capital planning and funding allocation
     - implement intermodal projects, and/or
     - streamline operations
   - Respondents that coordinate capital planning/allocation have built workable intermodal projects
   - Lack of coordination resulted in ill-timed project implementation, loss of projected toll revenues, cost overruns

Survey Summary (continued)

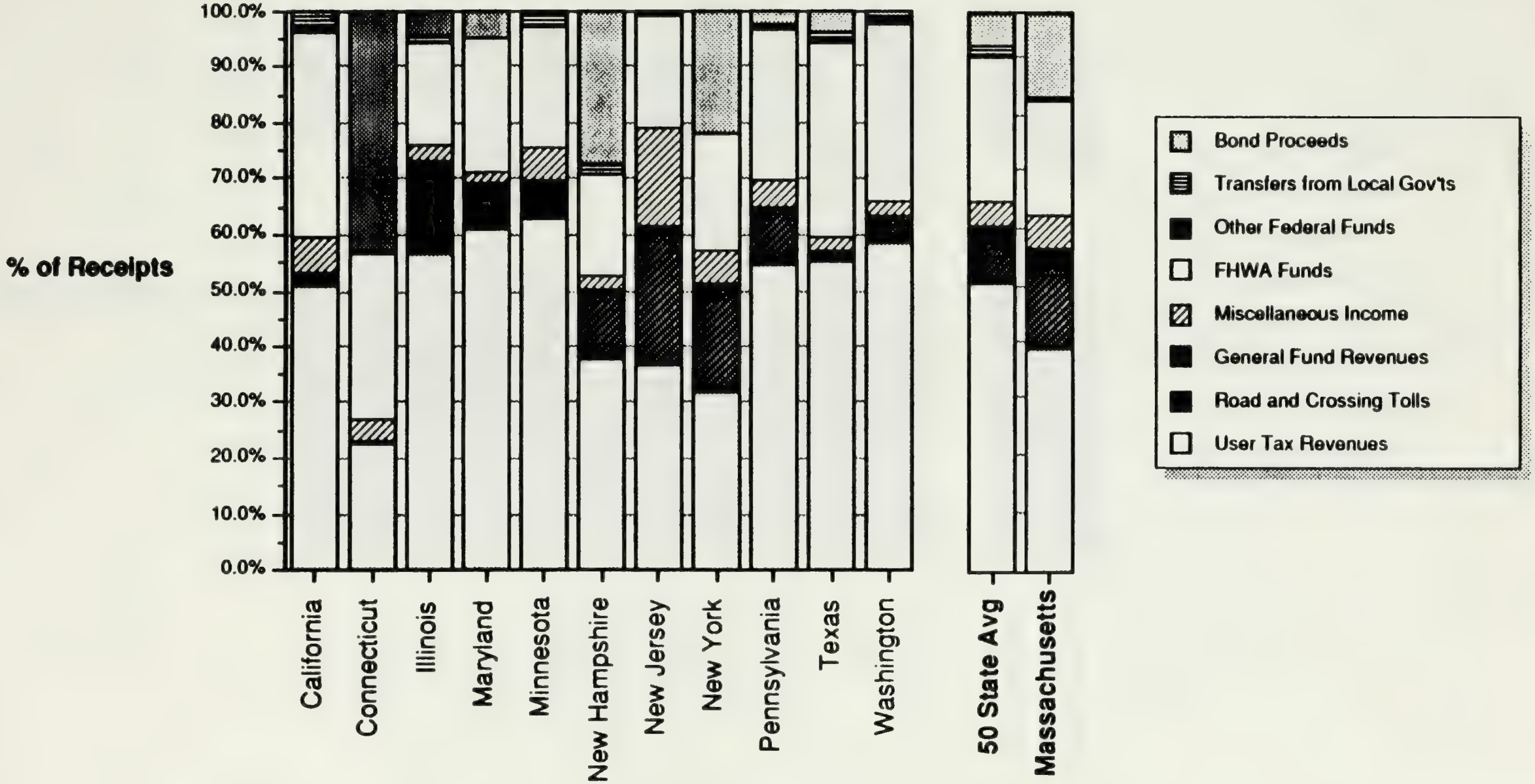
5. **Intermodal**
   - All state DOTs concerned about meeting ISTEA statewide planning requirements
   - California and Texas DOTs, where state laws already require statewide intermodal process, are the closest to meeting federal mandates
   - Best intermodal states have strong DOTs
     - state legislatures recently taken steps to increase DOT authority
     - DOTs responsible for operations, budgets, and/or capital planning of all or most state transportation agencies
     - DOTs report directly to Governor as cabinet-style

Survey Response Summary

TRANSPORTATION/HIGHWAY	SURVEY FORM RETURNED AND COMPLETED	PHONE INTERVIEW FOLLOW-UP
California	●	○
Connecticut	—	—
Florida	—	—
Illinois	○	—
Maryland	●	●
Minnesota	●	●
New Hampshire	●	●
New Jersey	○	●
New York	●	●
Pennsylvania	●	○
Texas	●	●
Washington	●	○
TRANSIT		
Chicago RTA	○	—
Chicago Transit Authority	●	—
Port Authority NY/NJ	●	○
Toronto	●	●
TOTAL RESPONDENTS	11	6

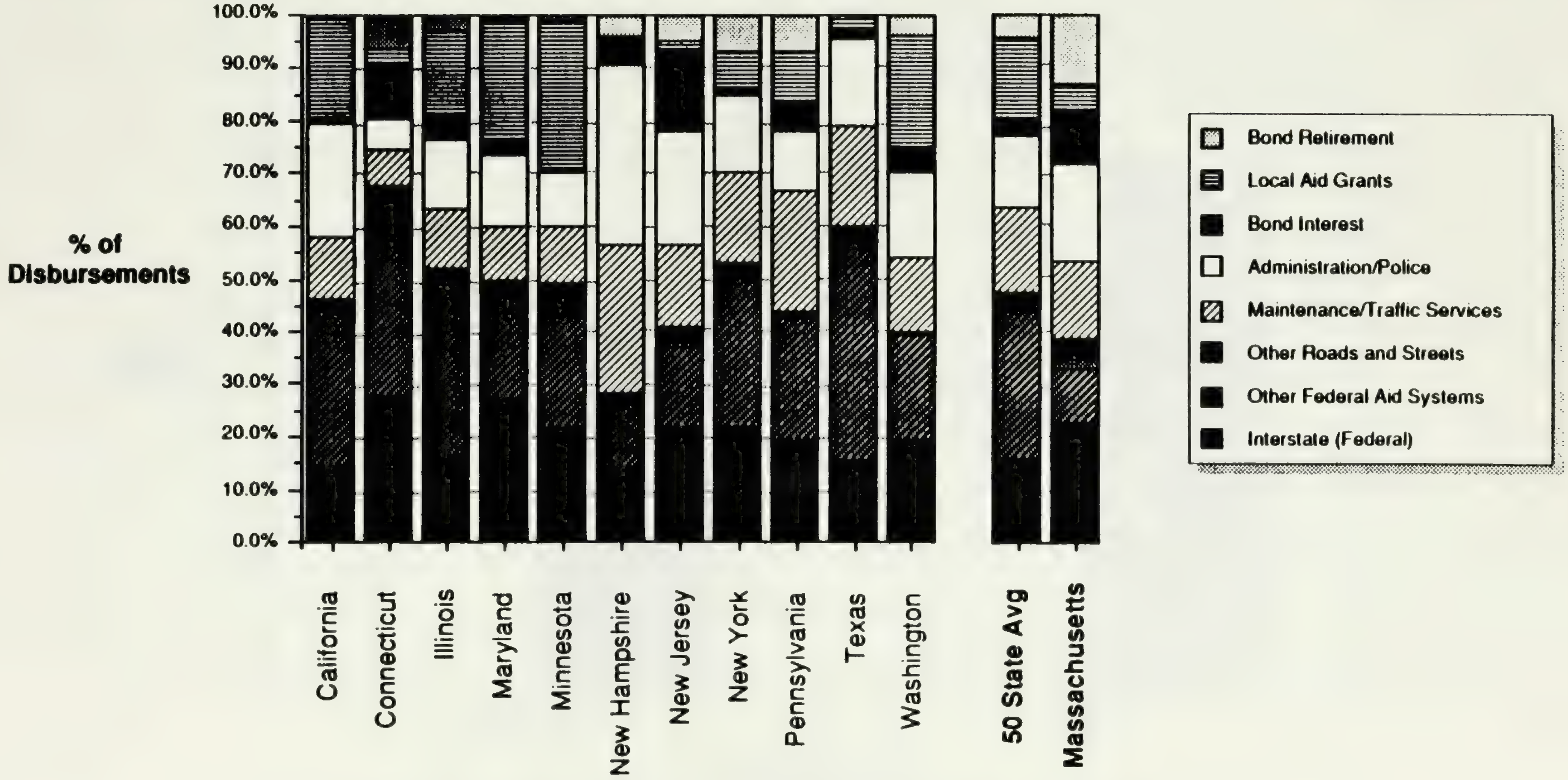
KEY:
● Completed
○ Expected
— Non-Response

Question 3: Source of State Highway Funds, 1990



Massachusetts relies more heavily on bond proceeds than the average state, dedicating less tax revenue. Other Northeastern states have a similar profile.

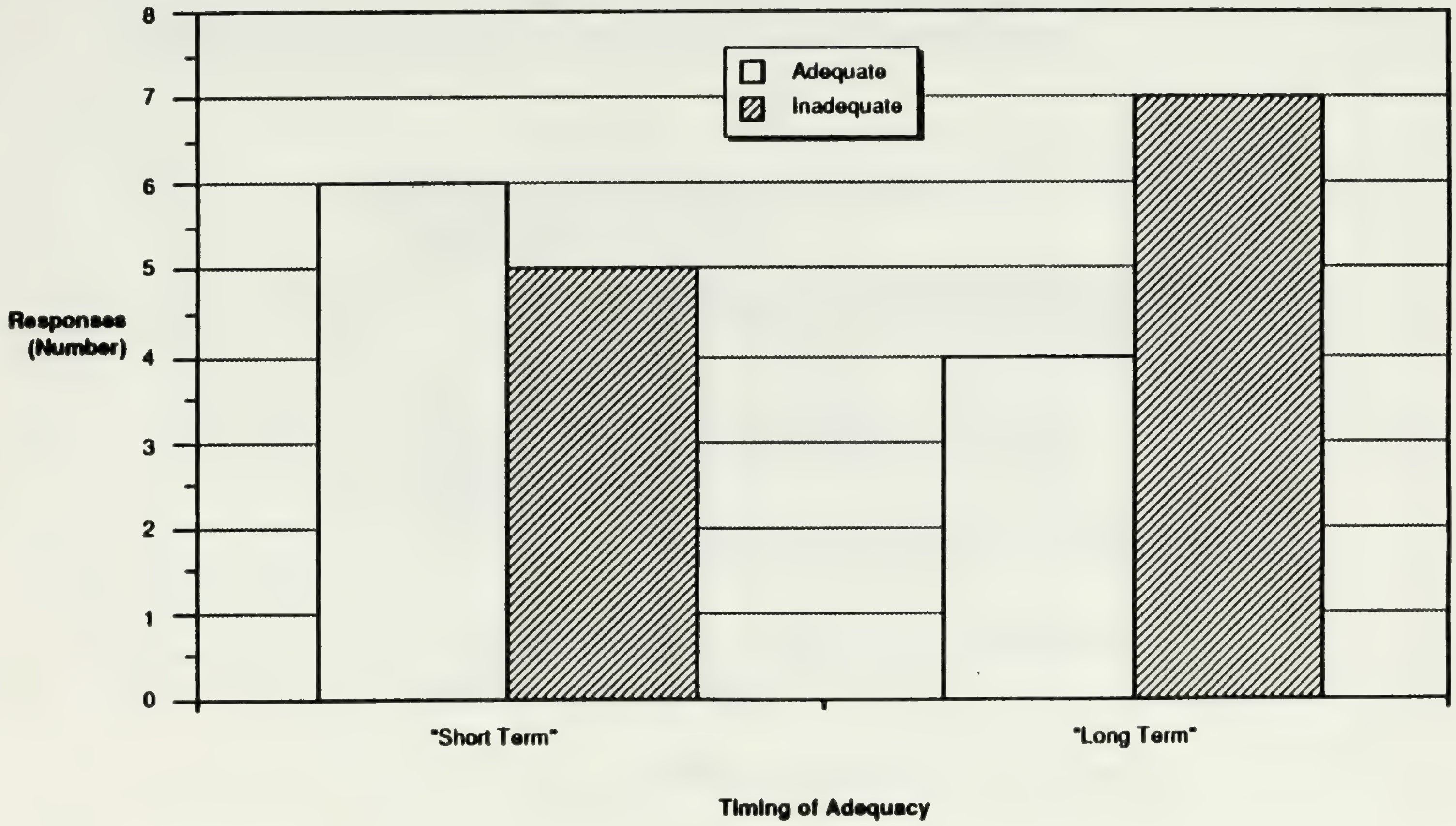
Question 3: Use of State Highway Funds, 1990



In total, Massachusetts used approximately 10% less on Federally funded projects than the average state. More funding goes to bond retirements and debt service allocated to local programs.

Question 4&5: Fund Source Adequacy

Number of Respondents Indicating Adequate or Inadequate



Questions 4 & 5: Fund Source Adequacy

Most state and local transit agencies had concerns about the adequacy of short and/or long term funding sources. Even those indicating adequacy of sources had reservations:

- *"Expenditures growing at 4%; revenues at 2%"*

  Pennsylvania Department of Transportation

- *"Ever increasing needs out pace available revenues at an alarming rate."*

  Washington State Department of Transportation

- *"Capital enhancements will require a revenue increase."*

  Maryland Department of Transportation

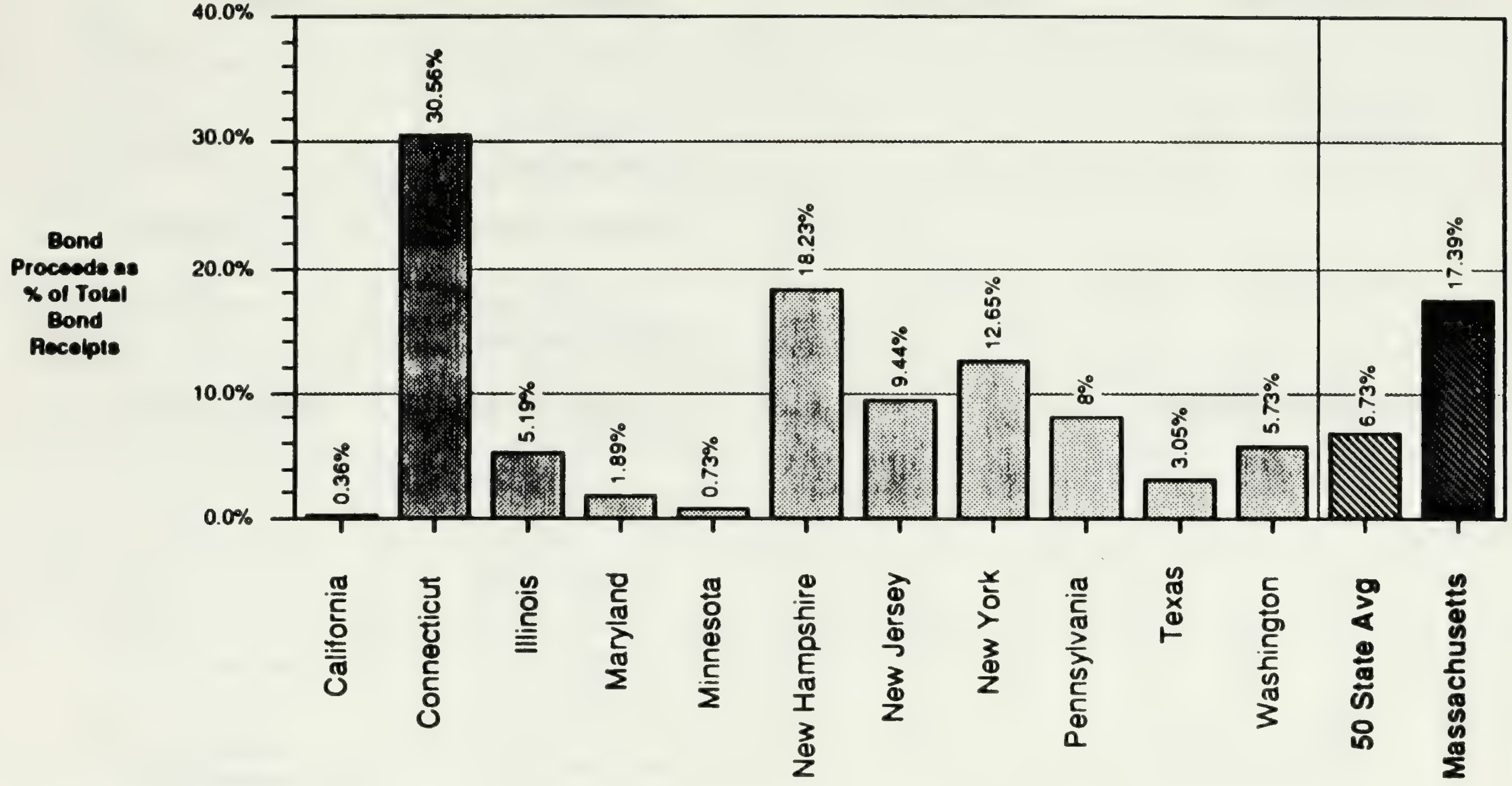
Question 6 &7: New or Unique Funding and Financing Sources[1]

	STATE / AGENCY	Minnesota	California	Chicago	Toronto	Pennsylvania	New York	Maryland	Washington State
TRADITIONAL	Motor Vehicle	○							
	Registration & License							●	
	Motor Fuel Tax	○					○	○	
	Diesel Tax							○	
	Sales Tax	○	●						
	Truck Tax & Fees	○					○		
	Tolls					○			
	Gasoline Products						○		●
NON-TRADITIONAL	Joint Development		○						
	Private Donations	○	●			○			
	Value Capture		○		●				
	Cross Border Leasing			●					
	Private Construction		●			○			
	Environmental Impacts								●
	Borrow against Future Appropriations		●						
	Property Revenues			●					

KEY:
○ Increase in Existing
● New

[1] Only those responding

Question 7: Debt Leverage
Bond Proceeds as Percent of Total Receipts, 1987 - 90



Question 8: Debt Issuances Criteria

STATE / AGENCY	SOURCES PLEDGED	COVERAGES MAINTAINED	STATUTORY LIMITATIONS/CAPS
Minnesota	Highway Fund		$10M Yr Max.
California	Sales Tax, Tolls Lease-Revenue Bonds		Voters/Legislature Decides
Chicago, Illinois	Lease Purchases		
Pennsylvania	Tolls, State Revenues for Bridges		
Toronto, Canada	Cannot Leverage		State Comptroller Has Authority
New York	Tolls, Fuel Tax		
Texas	"Pay-As-You-Go"		
New Hampshire	"Pay-As-You-Go"		
Port Authority New York/New Jersey	Independent Credit		Capital Plan Needs
Maryland	Net Revenues	2.0 - 2.5 X	$950 M
Washington	Fuel Tax		Depends on available tax revenues, Legislature. Usually 10-20% of revenues

Question 10: Use of Privatization Techniques

STATES/ AGENCIES	CONTRACTING OUT				PROJECT DEVELOPMENT									FINANCING	
	Maintenance	Security	Trans. Services	Feasibility Studies	TDD[1]	Impact Fees	Tax Inc Fin	Joint Dev.	Dev. Income	D/C/O[2]	Turnkey	Constr. Mgmt.	Land Donations	Safe Harbor	Cross Border
Minnesota				√											
California										√	√				
Chicago, Illinois												√			
Pennsylvania	√			√							√				
New York					√	√	√						√		
Texas	√														
New Hampshire			√												
Port Authority New York/NewJersey	√	√	√											√	
Maryland			√					√	√		√				√
Washington				√											

(1) Creation of Transportation Development Districts

(2) Design, Construct and Operate

Question 11: "Intermodal" Perspective

STATE / AGENCY	LEVEL OF DEVELOPMENT -STATEWIDE PLAN	HAVE RESTRUCTURED STATE TRANSPORTATION ORGANIZATION?	"CROSS POPULATED BOARDS?	COORDINATED CAPITAL PLANNING AND/OR ALLOCATION?	COORDINATED INTERMODAL PROJECTS?	COORDINATION/ INTEGRATION OF ADMINISTRATIVE FUNCTIONS
Minnesota	Medium	Yes		Yes		
California	High	Yes		Yes	Yes	
Chicago, Illinois		No	Yes	Yes	Yes	
Toronto, Canada				Yes	Yes	
Pennsylvania	Medium	Yes		Yes	Yes	
New York	Medium	Yes		Yes	Yes	
Texas	High	Yes	Yes	Yes	Yes	
New Hampshire	Low	No			Yes	
Port Authority New York, New Jersey		Yes		Yes	Yes	
Maryland	Medium	Yes		Yes	Yes	
Washington	Low	Yes		Yes		

Question 11: "Intermodal" Perspective

- *"As the 'operations' end of MN/DOT . . . faces more non-highway opportunities . . . the department will become intermodal."*

  Minnesota Department of Transportation

- *"The Department goal is to provide a fully integrated highway and transit system . . ."*

  Maryland Department of Transportation

- *"Policy is based on a 'balanced transportation' system."*

  Toronto Transit Authority

- *Over the years, we have build multimodal facilities for linking various transportation forms."*

  California Department of Transportation

- *"Pennsylvania is committed to the transportation of goods, services and people; not vehicles."*

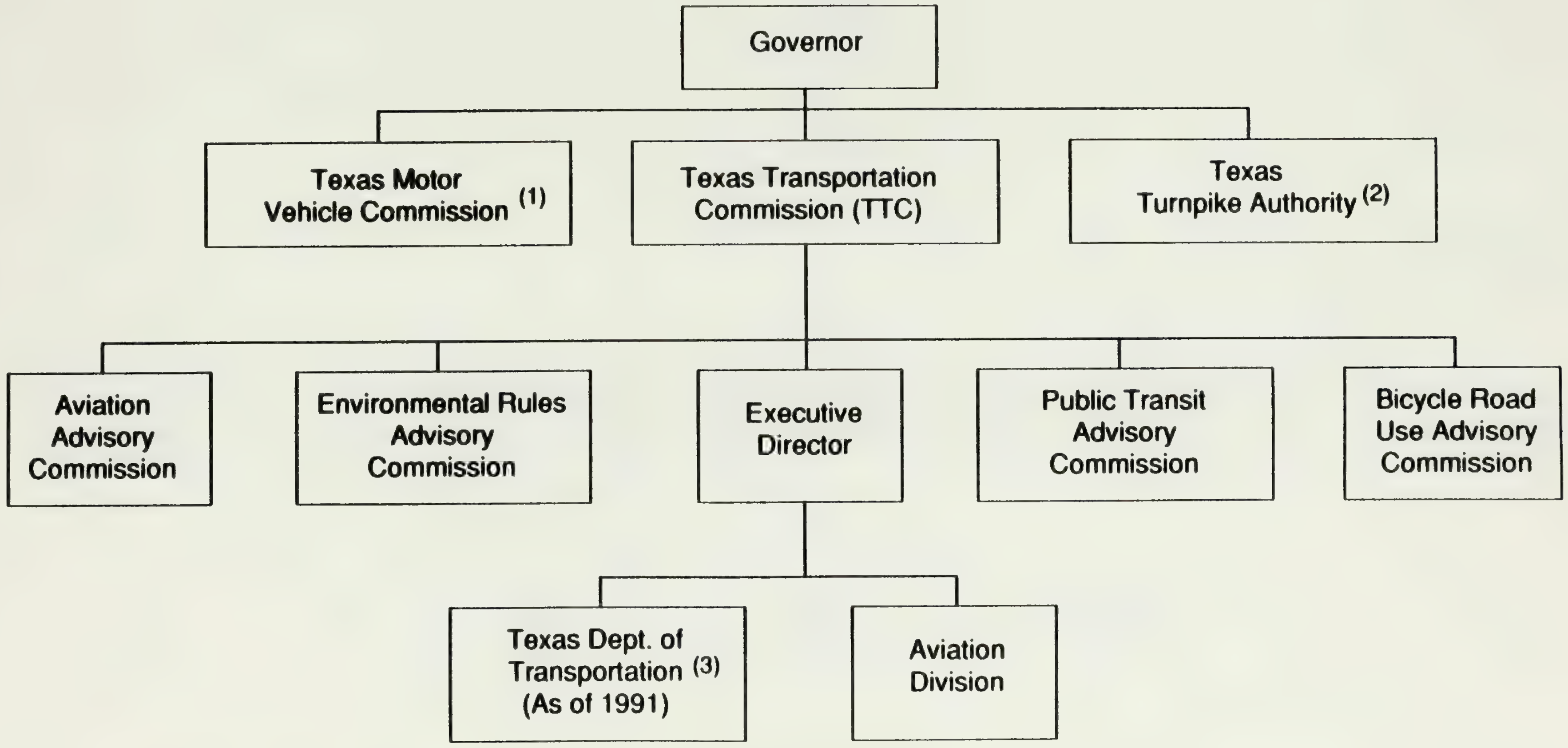
  Pennsylvania Department of Transportation

Question 12: Project "Cross Funding"

STATE / AGENCY	YES / NO	EXAMPLE
Minnesota	No	
California	Yes	Combine local funds (General, FAUS, Taxes) and State Funds (Tolls & Hwy Acct).
Chicago, Illinois	No	
Toronto, Canada	Yes	Gas taxes, license fees, parking taxes go into general fund.
Pennsylvania	Yes	Delaware River Toll Bridge Commission maintains "toll-free" bridges using funds from other toll bridges.
New York	Yes	Will use federal funds for toll facilities under ISTEA.
Texas	No	
New Hampshire	No	
Port Authority New York/New Jersey	Yes	All activities funded mostly by Tolls, Fares, Fees, and Rentals.
Maryland	Yes	Revenues in Trust Fund for all modes.
Washington	Yes	Ferry taxes. Tax subsidies for operations and maintenance, tax revenues and bonds for capital.

Texas

March, 1992


Governor
Texas Motor Vehicle Commission (1)
Texas Transportation Commission (TTC)
Texas Turnpike Authority (2)
Aviation Advisory Commission
Environmental Rules Advisory Commission
Executive Director
Public Transit Advisory Commission
Bicycle Road Use Advisory Commission
Texas Dept. of Transportation (3) (As of 1991)
Aviation Division

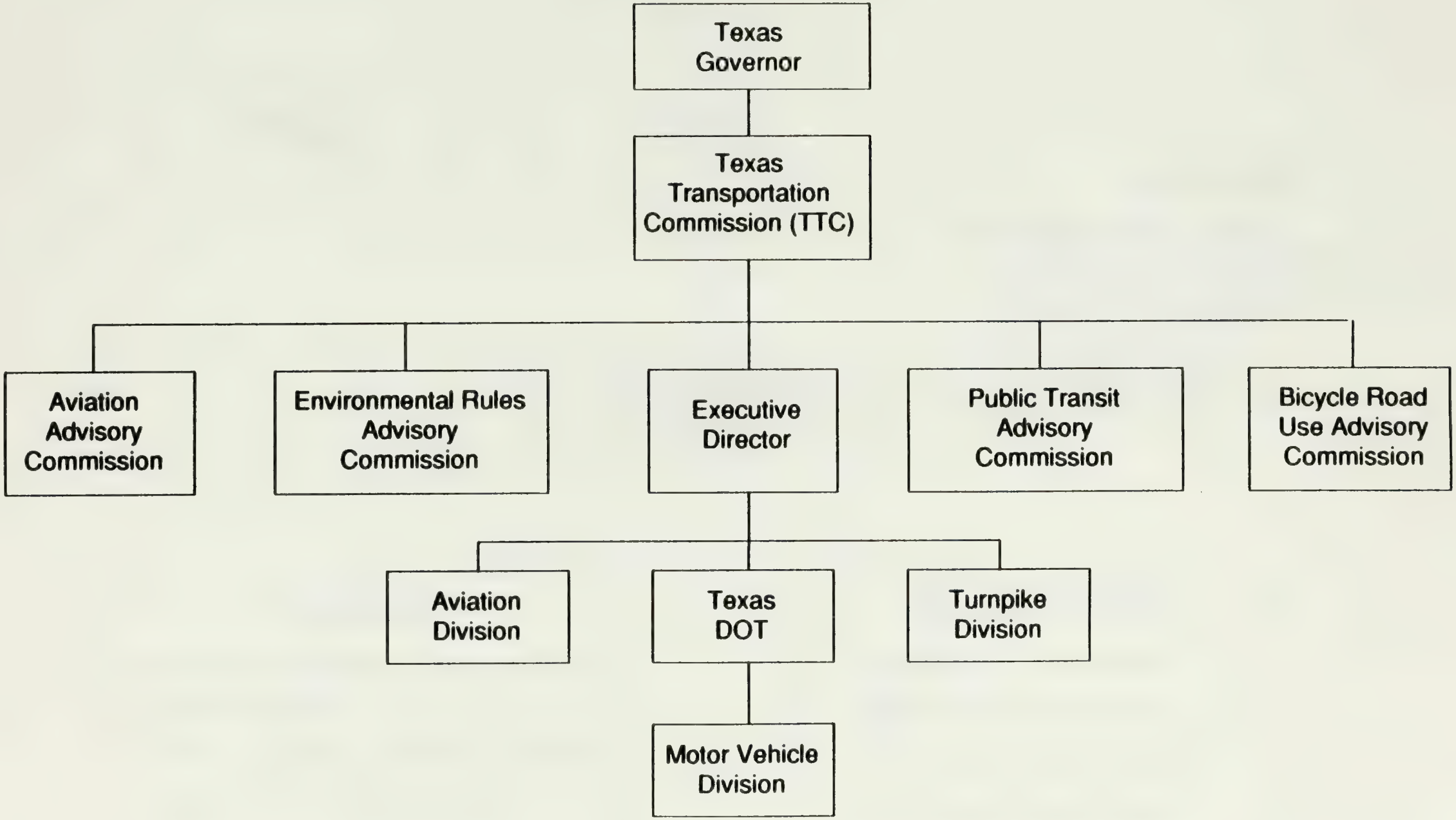
(1) *Texas Motor Vehicle Commission on Sept. 1, 1992 is merged under TTC and becomes Motor Vehicle Division under Texas Dept. of Transportation.*

(2) *If certain conditions are met, the Texas Turnpike Authority in 1997 is merged under TTC and becomes a separate turnpike division.*

(3) *Formerly was State Dept. of Highways and Public Transportation.*

Texas

1997 Plan



Texas Governor

Texas Transportation Commission (TTC)

Aviation Advisory Commission

Environmental Rules Advisory Commission

Executive Director

Public Transit Advisory Commission

Bicycle Road Use Advisory Commission

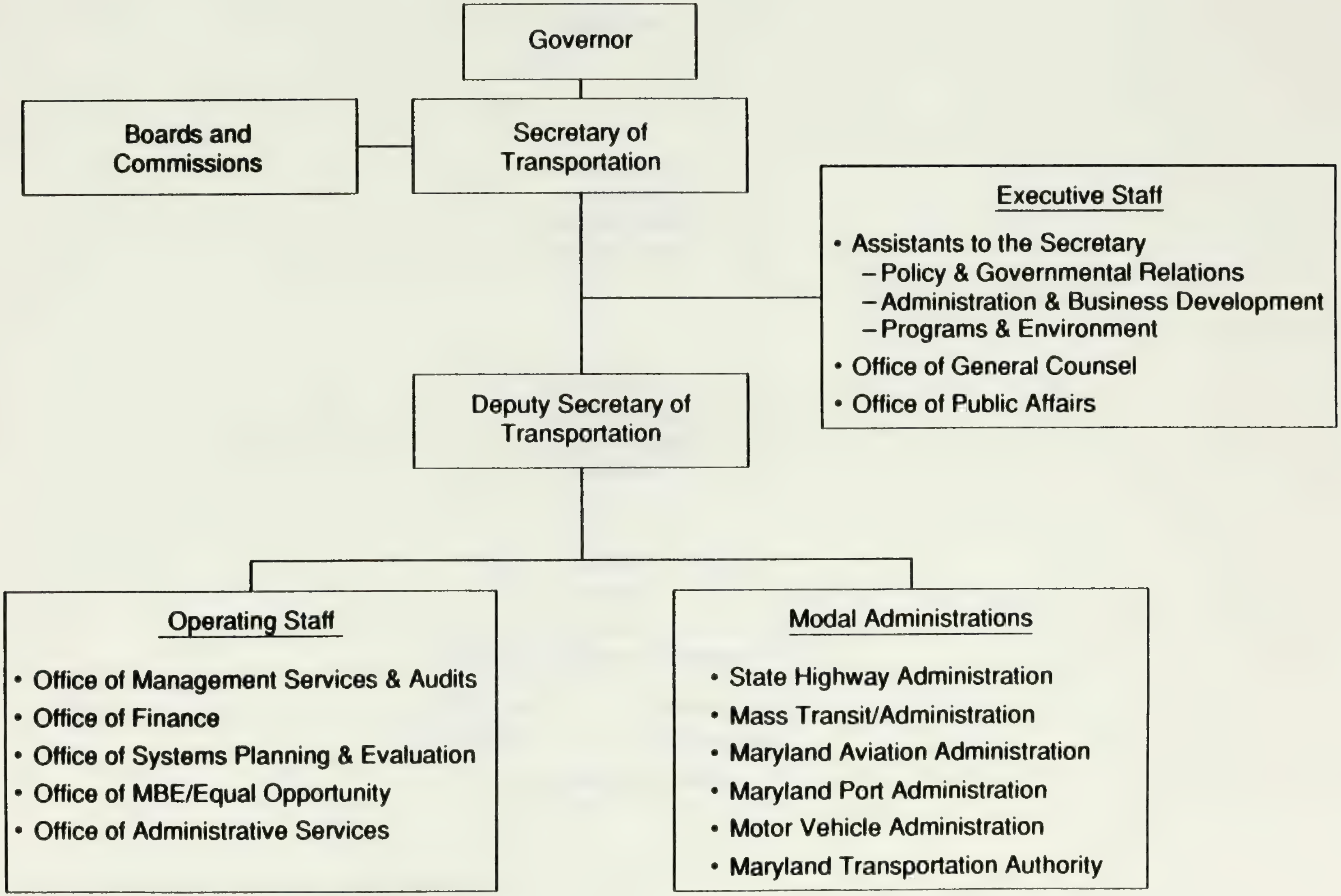
Aviation Division

Texas DOT

Turnpike Division

Motor Vehicle Division

Maryland



Governor

Boards and Commissions

Secretary of Transportation

Executive Staff

- Assistants to the Secretary
  - Policy & Governmental Relations
  - Administration & Business Development
  - Programs & Environment
- Office of General Counsel
- Office of Public Affairs

Deputy Secretary of Transportation

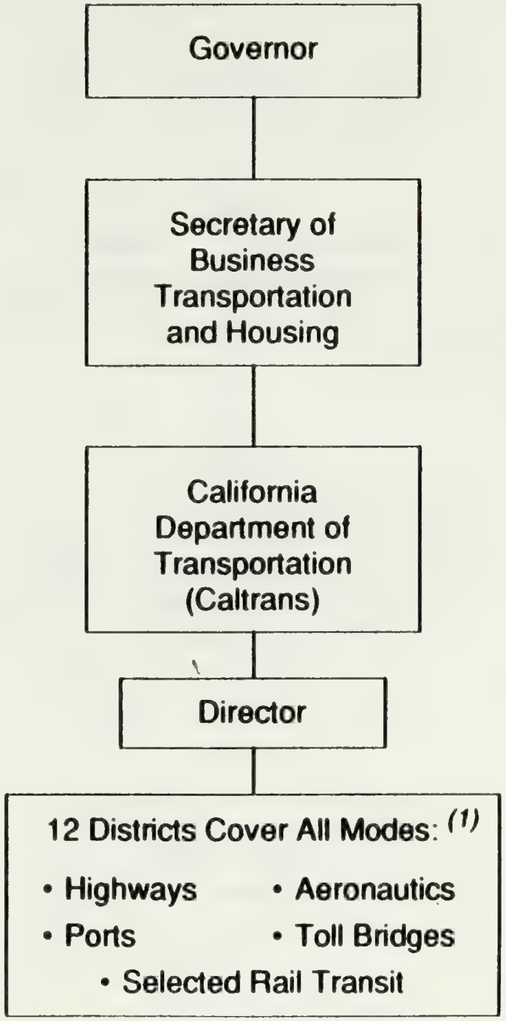
Operating Staff

- Office of Management Services & Audits
- Office of Finance
- Office of Systems Planning & Evaluation
- Office of MBE/Equal Opportunity
- Office of Administrative Services

Modal Administrations

- State Highway Administration
- Mass Transit/Administration
- Maryland Aviation Administration
- Maryland Port Administration
- Motor Vehicle Administration
- Maryland Transportation Authority

California



Governor

Secretary of Business Transportation and Housing

California Department of Transportation (Caltrans)

Director

12 Districts Cover All Modes: (1)

- Highways
- Aeronautics
- Ports
- Toll Bridges
- Selected Rail Transit

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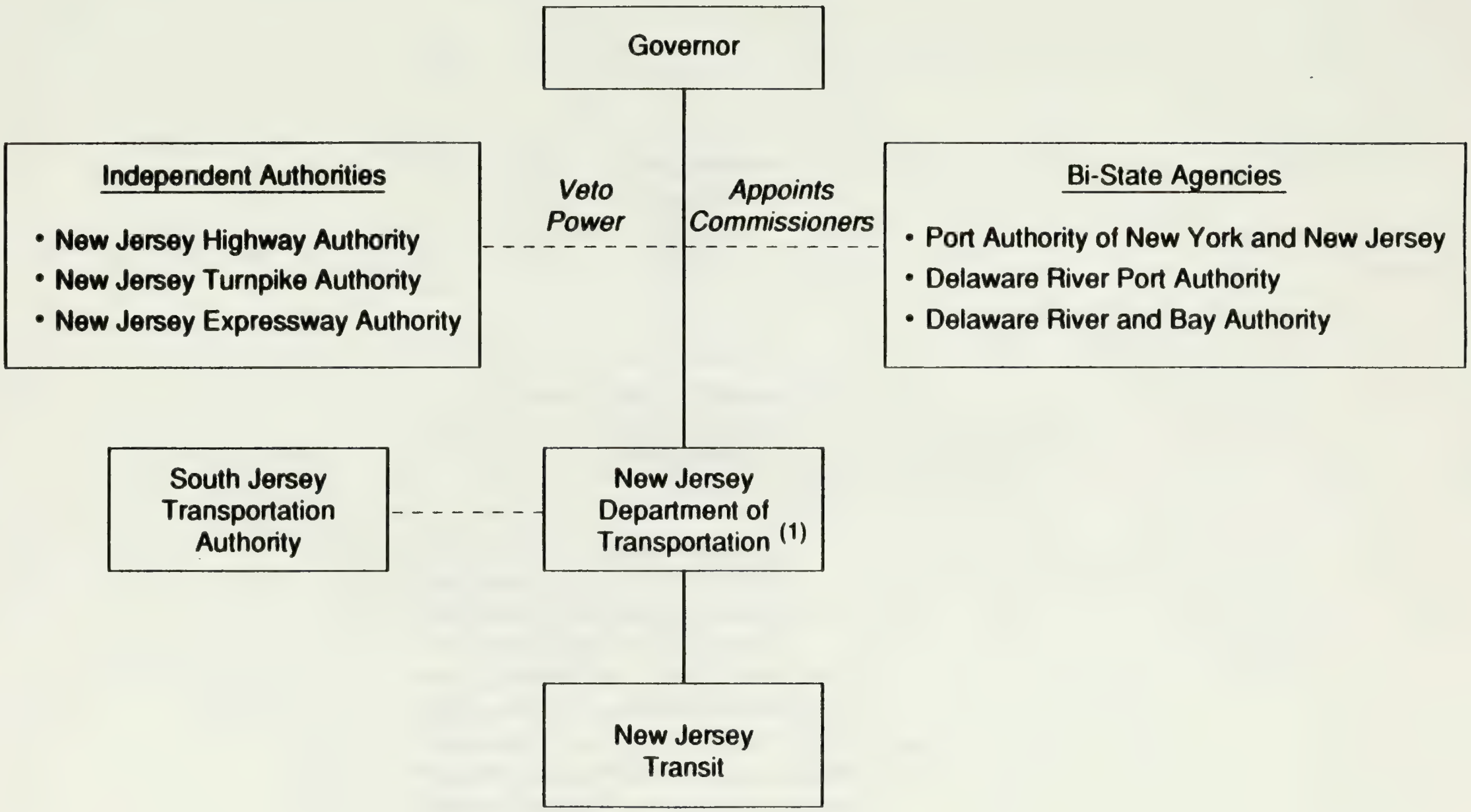
(1) Eleven of twelve districts cover multi-county areas (58 counties in California); one district covers a single county – Orange

New Jersey



Governor

Veto Power

Appoints Commissioners

Independent Authorities

- New Jersey Highway Authority
- New Jersey Turnpike Authority
- New Jersey Expressway Authority

Bi-State Agencies

- Port Authority of New York and New Jersey
- Delaware River Port Authority
- Delaware River and Bay Authority

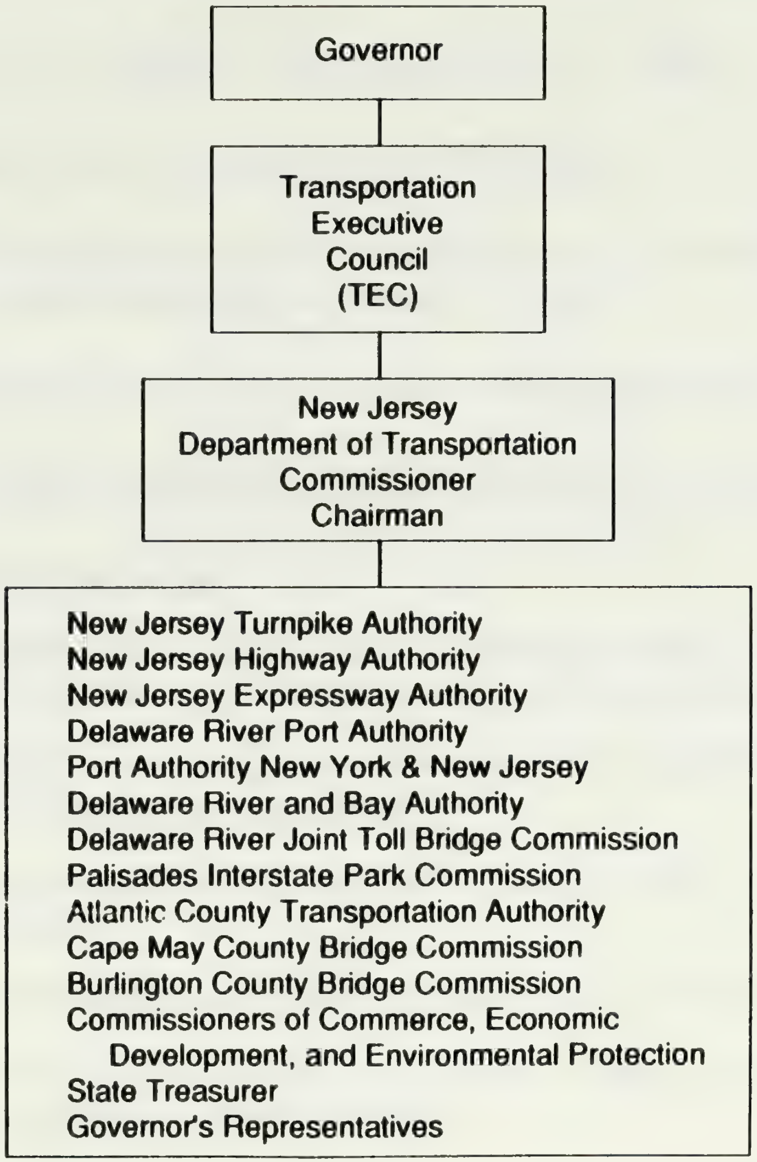
South Jersey Transportation Authority

New Jersey Department of Transportation (1)

New Jersey Transit

(1) New Jersey Department of Transportation Commissioner Chairs Boards of New Jersey Transit and South Jersey Transportation Authority

New Jersey Transportation Executive Council



Governor

Transportation
Executive
Council
(TEC)

New Jersey
Department of Transportation
Commissioner
Chairman

New Jersey Turnpike Authority
New Jersey Highway Authority
New Jersey Expressway Authority
Delaware River Port Authority
Port Authority New York & New Jersey
Delaware River and Bay Authority
Delaware River Joint Toll Bridge Commission
Palisades Interstate Park Commission
Atlantic County Transportation Authority
Cape May County Bridge Commission
Burlington County Bridge Commission
Commissioners of Commerce, Economic Development, and Environmental Protection
State Treasurer
Governor's Representatives

NEW JERSEY TRANSPORTATION EXECUTIVE COUNCIL

- Established by Executive Order on June 6, 1990
- Improves multimodal statewide coordination
- Chairman of the New Jersey Department of Transportation Commission represents New Jersey Transit
- Includes chairs of each independent transportation authority
- Establishes Technical Advisory Group to assist TEC
- Responsibilities include:
  - Recommendation of intermodal transportation policies to the Governor regarding policy, capital and operating investments
  - Development of strategic business plan, updated annually by each State agency and authority
    - Business plan must reflect coordinated, statewide strategies for all modes
    - Bi-state agencies requested to develop plan
  - Authority for TEC Chairman to obtain data or personnel from any state agency or department

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

HIGHWAY

I. Introduction and Background

The Executive Office of Transportation and Construction, State of Massachusetts is conducting a survey of highway organizations in other states. *The objective of this survey is primarily to determine how different states are addressing highway financing and funding issues.* Highway and transit funding in Massachusetts have both contributed to the current fiscal situation in the state. Some organizations, such as the Massachusetts Bay Transportation Authority (MBTA), are incurring significant annual net costs of service which the state supports with general obligation funds. These issues are intensified by the somewhat unique revenue situation in the state. Property taxes, which are used to fund regional transit, are capped at a growth rate of 2.5% per year as the result of a voter initiative approximately 10 years ago. While other sources of revenue are available to transportation, for example a 21¢ per gallon motor fuel tax, these are predominantly dedicated to highway rather than transit.

Your response to this survey will provide valuable input to the Massachusetts Executive Office of Transportation and Construction (EOTC) in generating new ideas regarding funding and financing techniques. By examining what other states are doing we hope to develop initiatives for Massachusetts which will assist in resolving the fiscal issues facing transportation in the state. Your time and candid response will be greatly appreciated.

The survey is being conducted by Deloitte & Touche, an independent management consulting firm, under contract to the EOTC. The survey will be conducted in two steps. First, we request that you complete and return the attached questionnaire, including any supporting information you believe to be appropriate. Secondly, Deloitte & Touche may follow-up with a telephone interview to clarify/amplify your responses. This will require approximately one half hour to forty five minutes to complete. We would welcome your efforts to discuss this questionnaire with other relevant individuals in your organization, or to involve them in completing the questionnaire or participating in the interview.

The process for completing the survey is as follows:

- Receive high level survey questions (incorporated in this package)
- FAX or mail the completed questionnaire to the identified Deloitte & Touche contact within 7 working days of receipt
- Within a week, a Deloitte & Touche representative will call to schedule a specific phone interview time
- Discuss questions and involve other people in your organization at your discretion
- Participate in phone interview
- If you have an interest, we will provide you with a summary of the survey findings as a thank you for your participation. Please indicate whether you have an interest in receiving this at the conclusion of your interview

I. Introduction and Background (Continued)

To assist us in better understanding your situation we request that you send us a copy of your most recent annual report and/or other pertinent information. This will help us to make the interview more efficient. Please direct this information, and any other comments/questions you may have to:

Mr. Reynold W. Mooney
Deloitte & Touche
125 Summer Street
Boston, MA 02110-1617

Phone: 1-617-261-8515
Fax: 1-617-261-8580

Thank you in advance for your participation in this effort.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

II. Background Information

1. Date	
Name	
Position	
State/Organization	
Phone Number	

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	***Position***	***Phone Number***

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

4. How adequate are these sources?

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

8. What criteria do you use in deciding when and how much debt to issue?

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

IV. Coordinating Functions/Operations

11. To what degree have you approached transit policy from an "intermodal" perspective? Please explain.

12. Do you "cross fund" projects with revenues generated from fares, fees, taxes, etc.? Please identify instances and explain rationale.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: BASECASE

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	226	353	409	419	407	381	313	221	78		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,653
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	134	137	140	144	148	152	156	160	164	168	703	1,503
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	0	6	4	4	4	6	6	6	6	6	18	48
Transit Operations	190	199	208	218	228	239	251	263	276	290	1,043	2,382
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	157	165	173	182	191	200	210	221	232	244	868	1,975
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
State General Fund (Local Assessment Match)	134	137	140	144	148	152	156	160	164	168	703	1,503
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,663	1,720	1,746	1,803	1,837	1,898	1,936	1,999	2,040	2,107	8,769	18,749
EXPENSE												
Administration (MITA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations:												
Transit	633	666	703	743	785	830	879	931	986	1,046	3,530	8,202
Highway	189	202	216	231	247	264	282	302	323	346	1,085	2,602
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	85	89	93	98	103	108	113	119	125	131	468	1,064
Operating Efficiencies	0	(10)	(25)	(40)	(55	(55)	(55)	(55)	(55)	(55	(130	(405
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	203	203	203	203	203	203	711	1,726
Total Expense	1,495	1,593	1,690	1,793	1,849	1,924	2,004	2,091	2,183	2,282	8,420	18,904
Annual Cash Surplus/(Deficit)	168	127	56	10	(12	(26)	(68)	(92)	(143)	(175	349	(155
Ending Cash Balance	226	353	409	419	407	381	313	221	78	(97		
MEMO: Assumed New Debt Issued	600	600	600	600	0	0	0	0	0	0	2,400	2,400
MEMO: Adjusted Gross Revenue Coverage	3.54	3.25	2.97	2.78	2.83	2.91	2.96	3.05	3.10	3.20		

SCENARIO DESCRIPTION: The initial amounts of both Local Assessments and State Matching Funds are set at $134 million. Beginning cash balance is [illegible] FY 92 highway [illegible] receipts. No toll increases. Fare increases keep pace with inflation.

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Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: BASECASE (Variant 1)

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	186	273	289	257	201	129	13	(129)	(324		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,653
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	114	117	120	123	126	129	132	135	138	141	600	1,275
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	0	6	4	4	4	6	6	6	6	6	18	48
Transit Operations	190	199	208	218	228	239	251	263	276	290	1,043	2,362
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	157	165	173	182	191	200	210	221	232	244	868	1,975
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
State General Fund (Local Assessment Match)	114	117	120	123	126	129	132	135	138	141	600	1,275
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,623	1,680	1,706	1,761	1,793	1,852	1,888	1,949	1,988	2,053	8,563	18,293
EXPENSE												
Administration (MITA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations:												
Transit	633	666	703	743	785	830	879	931	986	1,046	3,530	8,202
Highway	189	202	216	231	247	264	282	302	323	346	1,085	2,602
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	85	89	93	98	103	108	113	119	125	131	468	1,064
Operating Efficiencies	0	(10)	(25)	(40)	(55	(55)	(55)	(55)	(55)	(55	(130	(405
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	203	203	203	203	203	203	711	1,726
Total Expense	1,495	1,593	1,690	1,793	1,849	1,924	2,004	2,091	2,183	2,282	8,420	18,904
Annual Cash Surplus/(Deficit)	128	87	16	(32)	(56	(72)	(116)	(142)	(195)	(229	143	(611
Ending Cash Balance	186	273	289	257	201	129	13	(129)	(324)	(553		
MEMO: Assumed New Debt Issued	600	600	600	600	0	0	0	0	0	0	2,400	2,400
MEMO: Adjusted Gross Revenue Coverage	3.45	3.17	2.89	2.71	2.75	2.83	2.88	2.96	3.01	3.10		

SCENARIO DESCRIPTION: Initial Local Assessment and State Matching Fund amounts each were reduced by $20 million
Otherwise identical to BASECASE

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Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: (1) Constrained Operating Costs

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	311	540	719	877	988	1,071	1,133	1,188	1,218		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,653
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	134	137	140	144	148	152	156	160	164	168	703	1,503
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	0	6	4	4	4	6	6	6	6	6	18	48
Transit Operations	190	199	208	218	228	239	251	263	276	290	1,043	2,362
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	157	165	173	182	191	200	210	221	232	244	868	1,975
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
State General Fund (Local Assessment Match)	134	137	140	144	148	152	156	160	164	168	703	1,503
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,663	1,720	1,746	1,803	1,837	1,898	1,936	1,999	2,040	2,107	8,769	18,749
EXPENSE												
Administration (MITA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations:												
Transit	633	658	684	711	739	769	800	832	865	900	3,425	7,591
Highway	189	197	205	213	222	231	240	250	260	270	1,026	2,277
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	0	0	0	0	0	0	0	0	0	0	0	0
Operating Efficiencies	0	(10)	(25)	(40)	(55)	(55)	(55)	(55)	(55)	(55)	(130)	(405)
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	254	296	307	326	339	360	762	2,390
Total Expense	1,410	1,491	1,567	1,645	1,726	1,815	1,874	1,944	2,010	2,086	7,839	17,568
Annual Cash Surplus/(Deficit)	253	229	179	158	111	83	62	55	30	21	930	1,181
Ending Cash Balance	311	540	719	877	988	1,071	1,133	1,188	1,218	1,239		
MEMO: Assumed New Debt Issued	600	600	600	600	600	500	125	225	150	250	3,000	4,250
MEMO: Adjusted Gross Revenue Coverage	3.54	3.25	2.97	2.78	2.59	2.50	2.50	2.50	2.50	2.50		

SCENARIO DESCRIPTION MITA operating costs (Highway and Transit) are constrained to 4% growth Public Safety costs out of MITA

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Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: (2) Fare Increases

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	256	428	555	680	732	761	748	743	687		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,653
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	134	137	140	144	148	152	156	160	164	168	703	1,503
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	10	10	15	15	16	43	45	47	48	50	66	299
Transit Operations	190	225	236	294	308	324	340	357	375	394	1,253	3,043
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	177	180	205	210	214	209	213	249	254	257	986	2,168
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
State General Fund (Local Assessment Match)	134	137	140	144	148	152	156	160	164	168	703	1,503
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,693	1,765	1,817	1,918	1,952	2,029	2,067	2,162	2,203	2,268	9,145	19,874
EXPENSE												
Administration (MITA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations:												
Transit	633	666	703	743	785	830	879	931	986	1,046	3,530	8,202
Highway	189	202	216	231	247	264	282	302	323	346	1,085	2,602
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	85	89	93	98	103	108	113	119	125	131	468	1,064
Operating Efficiencies	0	(10)	(25)	(40)	(55)	(55)	(55)	(55)	(55)	(55)	(130)	(405)
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	254	279	279	279	279	279	762	2,157
Total Expense	1,495	1,593	1,690	1,793	1,900	2,000	2,080	2,167	2,259	2,358	8,471	19,335
Annual Cash Surplus/(Deficit)	198	172	127	125	52	29	(13)	(5)	(56)	(90)	674	539
Ending Cash Balance	256	428	555	680	732	761	748	743	687	597		
MEMO: Assumed New Debt Issued	600	600	600	600	600	300	0	0	0	0	3,000	3,300
MEMO: Adjusted Gross Revenue Coverage	3.62	3.30	3.05	2.85	2.65	2.64	2.67	2.80	2.83	2.90		

SCENARIO DESCRIPTION Sumner Tunnel goes to $1.30 in 93, $1.70 in 96 MassPike average nominal toll goes to $1.50 in 93, $1.70 in 96 Tobin Bridge goes to $1.30 in 93, $1.70 in 96 MBTA average fare goes to $1.00 in 94, $1.25 in 96

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Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: (3) General Fund Elimination

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	302	504	634	716	748	764	736	682	575		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,653
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	134	137	140	144	148	152	156	160	164	168	703	1,503
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	0	6	4	4	4	6	6	6	6	6	18	48
Transit Operations	190	199	208	218	228	239	251	263	276	290	1,043	2,362
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	157	165	173	182	191	200	210	221	232	244	868	1,975
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
Motor Vehicle Sales Tax	210	212	214	216	218	220	222	224	226	228	1,070	2,190
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,739	1,795	1,820	1,875	1,907	1,966	2,002	2,063	2,102	2,167	9,136	19,436
EXPENSE												
Administration (MTA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations												
Transit	633	666	703	743	785	830	879	931	986	1,046	3,530	8,202
Highway	189	202	216	231	247	264	282	302	323	346	1,085	2,602
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	85	89	93	98	103	108	113	119	125	131	468	1,064
Operating Efficiencies	0	(10)	(25)	(40)	(55	(55)	(55)	(55)	(55)	(55	(130	(405
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	229	229	229	229	229	229	737	1,882
Total Expense	1,495	1,593	1,690	1,793	1,875	1,950	2,030	2,117	2,209	2,308	8,446	19,060
Annual Cash Surplus/(Deficit)	244	202	130	82	32	16	(28)	(54)	(107)	(141	690	376
Ending Cash Balance	302	504	634	716	748	764	736	682	575	434		
MEMO: Assumed New Debt Issued	600	600	600	600	300	0	0	0	0	0	2,700	2,700
MEMO: Adjusted Gross Revenue Coverage	3.73	3.42	3.11	2.91	2.82	2.90	2.94	3.03	3.07	3.16		

SCENARIO DESCRIPTION State General Fund match of Local Assessment is replaced by Motor Vehicle Sales Tax

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Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: (4) Optimistic

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	417	766	1,090	1,435	1,731	2,004	2,221	2,450	2,655		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,653
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	134	137	140	144	148	152	156	160	164	168	703	1,503
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	10	10	15	15	16	43	45	47	48	50	66	299
Transit Operations	190	225	236	294	308	324	340	357	375	394	1,253	3,043
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	177	180	205	210	214	209	213	249	254	257	986	2,168
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
Motor Vehicle Sales Tax	210	212	214	216	218	220	222	224	226	228	1,070	2,190
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,769	1,840	1,891	1,990	2,022	2,097	2,133	2,226	2,265	2,328	9,512	20,561
EXPENSE												
Administration (MITA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations:												
Transit	633	658	684	711	739	769	800	832	865	900	3,425	7,591
Highway	189	197	205	213	222	231	240	250	260	270	1,026	2,277
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	0	0	0	0	0	0	0	0	0	0	0	0
Operating Efficiencies	0	(10)	(25)	(40)	(55)	(55)	(55)	(55)	(55)	(55)	(130)	(405)
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	254	305	349	379	389	406	762	2,590
Total Expense	1,410	1,491	1,567	1,645	1,726	1,824	1,916	1,997	2,060	2,132	7,839	17,768
Annual Cash Surplus/(Deficit)	359	349	324	345	296	273	217	229	205	196	1,673	2,793
Ending Cash Balance	417	766	1,090	1,435	1,731	2,004	2,221	2,450	2,655	2,851		
MEMO: Assumed New Debt Issued	600	600	600	600	600	600	525	350	125	200	3,000	4,800
MEMO: Adjusted Gross Revenue Coverage	3 80	3 46	3 20	2 98	2 76	2.64	2.50	2.50	2 50	2.50		

SCENARIO DESCRIPTION All assumptions from Scenarios 1 2 and 3 in effect

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Massachusetts Intermodal Transportation Authority
Public Transportation Trust Fund Cash Flows (1993–2002)

SCENARIO: (5) Optimistic Revenue Only

(Actual $ million, fiscal years)

FISCAL YEARS	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 YR CUM	10 YR CUM
Beginning Cash Balance	58	332	579	780	977	1,099	1,170	1,172	1,180	1,135		
INCOME												
Taxes and Assessments:												
Motor Fuel Tax	540	545	550	556	562	568	574	580	586	592	2,753	5,853
Cigarette Tax	25	25	25	25	25	25	25	25	25	25	125	250
Registry Fees	411	432	430	452	451	474	474	498	499	524	2,176	4,645
Other (From Highway Fund)	15	16	17	18	19	20	21	22	23	24	85	195
Local Assessment	134	137	140	144	148	152	156	160	164	168	703	1,503
Operating Revenues:												
Tolls (THT & Tobin Bridge – Net)	10	10	15	15	16	43	45	47	48	50	66	299
Transit Operations	190	225	236	294	308	324	340	357	375	394	1,253	3,043
Federal Operating Assistance	27	27	27	27	27	27	27	27	27	27	135	270
Turnpike Revenue	177	180	205	210	214	209	213	249	254	257	986	2,168
MassPort (Net)	20	21	22	23	24	25	26	27	28	29	110	245
Motor Vehicle Sales Tax	210	212	214	216	218	220	222	224	226	228	1,070	2,190
Interest Income	10	10	10	10	10	10	10	10	10	10	50	100
Total Income	1,769	1,840	1,891	1,990	2,022	2,097	2,133	2,226	2,265	2,328	9,512	20,561
EXPENSE												
Administration (MITA)	5	5	5	5	5	5	5	5	5	5	25	50
Operations:												
Transit	633	666	703	743	785	830	879	931	986	1,046	3,530	8,202
Highway	189	202	216	231	247	264	282	302	323	346	1,085	2,602
Registry	38	40	42	44	46	48	50	53	56	59	210	476
Public Safety	85	89	93	98	103	108	113	119	125	131	468	1,064
Operating Efficiencies	0	(10)	(25)	(40)	(55)	(55)	(55)	(55)	(55)	(55)	(130)	(405)
Pension and Other	96	101	106	111	117	123	129	135	142	149	531	1,209
Local Aid (Ch. 90)	41	41	41	41	41	41	41	41	41	41	205	410
Debt Service:												
MBTA Refundings	190	190	190	190	190	190	190	190	190	190	950	1,900
MHD Refundings	130	130	130	130	130	130	130	130	130	130	650	1,300
MassPike Refundings	37	37	37	37	37	37	37	37	37	37	185	370
New Debt Issues	51	102	152	203	254	305	330	330	330	330	762	2,387
Total Expense	1,495	1,593	1,690	1,793	1,900	2,026	2,131	2,218	2,310	2,409	8,471	19,565
Annual Cash Surplus/(Deficit)	274	247	201	197	122	71	2	8	(45)	(81)	1,041	996
Ending Cash Balance	332	579	780	977	1,099	1,170	1,172	1,180	1,135	1,054		
MEMO: Assumed New Debt Issued	600	600	600	600	600	600	300	0	0	0	3,000	3,900
MEMO: Adjusted Gross Revenue Coverage	3.80	3.46	3.20	2.98	2.76	2.64	2.57	2.68	2.71	2.78		

SCENARIO DESCRIPTION: All assumptions from Scenarios 2 and 3 in effect

FARE INCREASE IMPACT MODEL

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($ IN MILLIONS UNLESS OTHERWISE INDICATED)	BASE	FISCAL YEARS (w/ fare increases):									
	1993	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOLLS											
THT											
Transactions (millions)	NA			13.41	13.74	14.07	37.33	38.19	38.95	39.83	40.71
Nominal Toll ($)	NA			$1.70	$1.70	$1.70	$2.70	$2.70	$2.80	$2.80	$2.80
Actual Toll ($)	NA			$0.60	$0.60	$0.59	$0.94	$0.95	$0.98	$0.98	$0.98
Gross Revenue	NA			8.0	8.2	8.4	35.3	36.1	38.2	39.0	39.9
Operating Cost	NA			8.9	9.3	9.8	10.3	10.8	11.4	11.9	12.5
Net Revenue	NA			(0.9)	(1.2)	(1.4)	25.0	25.3	26.8	27.1	27.4
Tobin Bridge											
Traffic (millions)	12.00	12.00	12.60	13.23	13.89	14.59	15.32	16.08	16.89	17.73	18.62
Actual/Nominal Toll ($)	$1.00	$1.30	$1.30	$1.70	$1.70	$1.70	$1.70	$1.70	$1.70	$1.70	$1.70
Gross Revenue	12.0	15.6	16.4	22.5	23.6	24.8	26.0	27.3	28.7	30.1	31.6
Operating Cost	6.0	6.0	6.3	6.6	6.9	7.3	7.7	8.0	8.4	8.9	9.3
Net Revenue	6.0	9.6	10.1	15.9	16.7	17.5	18.4	19.3	20.3	21.3	22.3
THT/Tobin Combined Net Revenue	6.0	9.6	10.1	15.0	15.5	16.1	43.4	44.6	47.1	48.4	49.7
TRANSIT OPERATIONS											
MBTA											
Base Ridership (millions)	NA	162.34	169.00	175.93	183.14	190.65	198.46	206.60	215.07	223.89	233.07
Ridership loss due to fare increases*	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adjusted Ridership (millions)	NA	162.34	169.00	175.93	183.14	190.65	198.46	206.60	215.07	223.89	233.07
Average Fare ($)	NA	$0.85	$1.00	$1.00	$1.25	$1.25	$1.25	$1.25	$1.25	$1.25	$1.25
Gross Fare Revenue	NA	138.3	169.0	175.9	228.9	238.3	248.1	258.3	268.8	279.9	291.3
Other Operating Revenue	NA	13.0	14.4	15.8	17.5	19.3	21.3	23.5	26.0	28.7	31.7
State Contract Asst (RR svc out of dist)		13.3	14.2	15.3	16.3	17.5	18.8	20.1	21.5	23.0	24.7
Subtotal MBTA Operating Revenue	NA	164.6	197.6	207.0	262.8	275.1	288.2	301.9	316.3	331.6	347.7
RTAs											
Gross Fare Revenue	NA	17.6	18.5	19.4	20.4	21.4	22.5	23.6	24.8	26.0	27.3
Other Operating Revenue	NA	8.1	8.9	9.8	10.8	11.9	13.0	14.3	15.8	17.4	19.1
Subtotal RTA Operating Revenue	NA	25.7	27.4	29.2	31.2	33.3	35.5	37.9	40.5	43.4	46.4
Total Transit Operating Revenue	NA	190.3	225.0	236.2	293.9	308.4	323.7	339.8	356.9	375.0	394.1
		*** Ridership was assumed to be inelastic**									
TURNPIKE											
SUMNER TUNNEL											
Bechtel Traffic data	52454	52454	53336	47681	48841	50009	29837	30528	31135	31833	32537
Annual Change Rate (from prior yr)	4.11%	4.11%	1.68%	-10.60%	2.43%	2.39%	-40.34%	2.32%	1.99%	2.24%	2.21%
Transactions (millions)	17.43	17.43	17.73	15.85	16.23	16.62	9.92	10.15	10.35	10.58	10.81
Nominal Toll ($)	$1.00	$1.30	$1.30	$1.70	$1.70	$1.70	$2.70	$2.70	$2.80	$2.80	$2.80
Revenue/Transaction ($)	$0.98	$1.27	$1.27	$1.67	$1.67	$1.67	$2.65	$2.65	$2.74	$2.74	$2.74
Gross Toll Revenue	17.1	22.2	23.0	26.9	27.6	28.3	26.8	27.4	29.0	29.6	30.3
Other Operating Revenue	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Gross Total Revenue	17.2	22.3	23.2	27.1	27.7	28.4	26.9	27.5	29.1	29.8	30.4
Operating Cost	9.5	9.5	10.0	10.5	11.0	11.5	12.1	12.7	13.4	14.0	14.7
Net Revenue	7.7	12.8	13.2	16.6	16.7	16.8	14.8	14.8	15.8	15.7	15.7
TURNPIKE											
Bechtel Traffic data	432981	432981	438947	443052	451411	459928	447959	456410	462139	470858	474820
Annual Change Rate (from prior yr)	1.38%	1.38%	1.38%	0.94%	1.89%	1.89%	-2.60%	1.89%	1.26%	1.89%	0.84%
Transactions (millions)	142.19	142.19	144.15	145.49	148.24	151.04	147.11	149.88	151.76	154.63	155.93
Nominal Average Toll ($)	$1.35	$1.50	$1.50	$1.70	$1.70	$1.70	$1.70	$1.70	$2.00	$2.00	$2.00
Revenue/Transaction ($)	$0.92	$1.03	$1.03	$1.16	$1.16	$1.16	$1.16	$1.16	$1.37	$1.37	$1.37
Gross Toll Revenue	131.2	145.8	147.8	169.1	172.3	175.6	171.0	174.2	207.5	211.4	213.2
Other Operating Revenue	8.5	8.5	8.9	9.3	9.8	10.3	10.8	11.3	11.9	12.5	13.1
Gross Total Revenue	139.7	154.3	156.7	178.4	182.1	185.8	181.8	185.5	219.4	223.9	226.3
Operating Cost	60.0	60.0	63.0	66.1	69.4	72.9	76.5	80.4	84.4	88.6	93.0
Net Revenue	79.7	94.3	93.7	112.3	112.7	112.9	105.2	105.2	135.0	135.3	133.3
TURNPIKE (Grand Total)											
Transactions (millions)	159.6	159.6	161.9	161.3	164.5	167.7	157.0	160.0	162.1	165.2	166.7
Gross Toll Revenue	148.3	168.0	170.9	196.1	199.9	203.8	197.8	201.6	236.5	241.1	243.5
Other Operating Revenue	8.6	8.6	9.0	9.4	9.9	10.4	10.9	11.5	12.0	12.6	13.3
Total Gross Revenue	156.9	176.6	179.9	205.5	209.8	214.2	208.7	213.1	248.5	253.7	256.8
Operating Cost	69.5	69.5	72.9	76.6	80.4	84.4	88.6	93.1	97.7	102.6	107.8
Net Revenue	87.4	107.1	106.9	128.9	129.4	129.8	120.0	120.0	150.8	151.1	149.0

Massachusetts Intermodal Transportation Trust Fund
Base Case Cash Flow Assumptions

1. Income - Taxes and Assessments:

a. *Beginning Cash Balance* - Respresents $58 million projected to remain in the current Highway Fund from consolidated transfers at the end of state fiscal year (SFY) 1992.

b. *Motor Fuel Tax* - This tax is estimated at $540 million in FY 1993 by the State and is projected to grow at approximately 1% annually. This represents 100% of the tax. Currently, approximately 98% of the tax is dedicated to the Highway Fund.

c. *Cigarette Tax* - The portion of the tax, $25 million, currently dedicated to the Highway Fund is included. House 1 SFY 1993 sweeps this into the General Fund. Growth is projected to be flat.

d. *Registry Fees* - These fees are estimated at $411 million in House 1 SFY 1993 and projected to grow at 5% annually. Assumes impact of two year registrations for commercial vehicles will reduce 1995 and 1997, 1998 and 2001 fees by $24 million in each year.

e. *Other Highway Fund Revenues* - These revenues consist of $11 million from departmental and other non-tax revenues and $4.5 million in Federal reimbursements. These items are identified in House 1 SFY 1993, dedicated to the Highway Fund, and are projected to grow at 5% per year. The $42 million "MITA benefit" included in House 1 is excluded.

f. *Local Assessments* - These assessments are estimated at $134 million in SFY 1993 and projected to grow at 2.5% per year. It includes local assessments for MBTA and RTA's Net Cost of Service at existing levels.

Massachusetts Intermodal Transportation Trust Fund *Base Case Cash Flow Assumptions*

(Continued)

2. Income - Operating Revenues:

a. *Tolls* - These tolls include estimated Third Harbor Tunnel and Tobin Bridge net toll revenues. Tobin Bridge net in SFY 1993 is expected to be at the breakeven level. A projected toll increase from 50 cents to $1.00 in FY 1994 is expected to result in a $6 million positive net revenue. Third Harbor Tunnel net revenue, based on the Lazard Freres report, is expected to be $(2) million initially growing to $1.5 million by 1998.

b. *Transit Operations* - These revenues are estimated based on SFY 1993 MBTA and RTA's fare revenue, other operating and state contract assistance. Growth of 5% p.a. is based on historical ridership growth and growth of other operating revenue and not general fare increases.

c. *Federal Operating Assistance* - This assistance includes SFY 1993 anticipated federal assistance for MBTA and RTA's operating expenses, constant through plan period.

d. *Turnpike Revenue* - This includes an estimate of FY 1993 Turnpike toll and other revenue, assuming 5% p.a. growth through plan period assuming traffic growth only.

e. *MassPort* - This is an estimated "surplus" of SFY 1993 net revenues, growing at 5% per annum. Assumed changes to MassPort operating situation are revenues increased by an estimated $25 million annually for Passenger Facility Charges implementation and elimination of the Tobin Bridge net revenue.

f. *State General Fund* - Assumes General Fund will match local assessments on cities and towns for annual Net Cost of Service of MBTA and RTA's.

Massachusetts Intermodal Transportation Trust Fund
Base Case Cash Flow Assumptions

(Continued)

g. *Interest Income* - This is assumed to be interest income on the average available fund cash balance. Assumes an even spending pattern throughout the year and 5 percent interest rate.

3. Expense - Administration:

a. *MITA* -.Assumes $5 million administration cost of MITA to perform certain consolidated administrative, finance planning and other functions.

4. Expense - Operations:

a. *Transit* - Includes SFY 1993 estimated operating costs for MBTA and RTA's growing at a projected 5.4% per year, based on the average historical growth rate between 1986 and 1992, inflation included.

b. *Highway* - Assumes MHD, MAC and EOTC operating costs plus Turnpike operating costs projected at $75 million. Costs are projected to grow at 7% per annum. Includes assumption that turnpike returns all net revenue to Trust Fund which finances Turnpike capital program.

c. *Registry* - Estimated House SFY 1993 Registry operating costs, projected to grow at 5% per annum.

d. *State Police* - Estimated House 1SFY 1993 operating costs included, projected to grow at 5% per annum.

Massachusetts Intermodal Transportation Trust Fund
Base Case Cash Flow Assumptions

(Continued)

e. *Operating Efficiencies* - These assume implementation of management initiatives identified in the 1990 Morgan Stanley report to save approximately $30 million, plus an incremental $25 million in additional savings through efficiencies gained through consolidation.

f. *Pension and Other* - Assumes current FY 1993 costs for fringe benefits, costs for collection of gas tax, MVMB reserve, and costs to Consumer Affairs.

g. *Local Aid* - This assumes that the current 7.5% contribution of gas tax to local authorities for operating assistance continues. The additional 7.5% available to be bonded for local capital assistance is assumed to be incorporated in the refunded debt service or incremental available bonding capacity.

5. Debt Service and New Debt Issuance:

a. *MBTA Refundings* - $190 million p.a. debt service assumed to refund approximately $1.7 billion existing long term debt (excluding $58 million non-refundable 1986 Series A Refunding Bonds). Bonds are assumed to be tax exempt, 30 year maturities, level debt service MITA bonds bearing 7.3% simple interest. Ratings on bonds, given revenue based security, is assumed to be "A" credit. Cash flow shown incorporates assumptions regarding costs of issuance and reserve requirements. Does not include $80 million p.a. debt service required to refund approximately $760 million of short term State and MBTA obligations to "forward fund" MBTA.

Massachusetts Intermodal Transportation Trust Fund
Base Case Cash Flow Assumptions

(Continued)

b. *MHD Refundings* - $130 million p.a. debt service assumed to refund approximately $1.4 billion (principle amount) of existing Highway obligations incorporated in State of Massachusetts general obligation debt. Other assumptions regarding bonds same as 6.a.

c. *MassPike Refundings* - $37 million p.a. debt service assumed to refund approximately $200 million of existing debt. An uneconomic refunding necessary to eliminate Turnpike Trust Agreement. Other assumptions regarding bonds same as in 6.a.

d. *New Debt Issues* - New debt was assumed to be issued secured by certain Trust revenues not generated by operating entities. Assumes bond covenants will require a minimum coverage of 2.5 times "adjusted" gross revenue to total debt service and a minimum ending cash balance of at least $100 million. New debt was assumed issued in $600 million annual increments (mirroring the combined Highway and Transit caps) until these conditions are exceeded.

6. General:

a. Model assumes that MITA structure, trust and refundings are all implemented by start of state fiscal year 1993. Delays in implementing the structure will impact the results shown.

7. Scenarios:

a. See scenario descriptions at bottom of each work flow sheet and on summary display.

Massachusetts Transportation Capital Needs

FY 92 $ in Millions	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	92 to 97 Cum	92 to 02 Cum
MBTA Capital Spending (Note 1)													
Base Spending	362.9	581.3	787.5	785.3	872.1	1,036.6	966.5	842.9	701.5	676.1	675.4	4,425.8	8,288.2
Federal Funding (Sections 3, 9, 23)	109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0	35.0	948.9	1,408.4
Non-IC Funding (Note 2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net State Requirement	253.5	416.5	580.7	646.1	730.9	849.2	814.2	690.8	616.4	641.1	640.4	3,476.9	6,879.7
CA/T Capital Spending (Note 3)													
Proposed Action Modified for 8.1.D.	414.4	885.9	751.1	514.2	823.8	949.5	777.2	417.5	146.7	36.9	0.0	4,338.9	5,717.2
8.1.D.	0.0	8.9	8.9	42.5	63.7	84.9	84.9	63.7	42.5	0.0	0.0	208.9	400.0
Subtotal CA/T Cost	414.4	894.8	760.0	556.7	887.5	1,034.4	862.1	481.2	189.2	36.9	0.0	4,547.8	6,117.2
IC Funding (Note 4)	259.7	560.8	476.3	348.9	556.2	648.2	0.0	0.0	0.0	0.0	0.0	2,850.0	2,850.0
Non-IC Funding (Note 2)	0.0	128.0	108.7	79.6	127.0	148.0	0.0	0.0	0.0	0.0	0.0	591.3	591.3
Net State Requirement	154.7	206.0	175.0	128.2	204.4	238.2	862.1	481.2	189.2	36.9	0.0	1,106.5	2,675.9
MHD Capital Spending (Note 5)													
Base Spending	520.9	734.0	552.0	544.0	543.0	543.0	543.0	543.0	543.0	543.0	543.0	3,436.9	6,151.9
Non-IC Funding (Note 2)	280.9	347.3	261.2	257.4	256.9	256.9	0.0	0.0	0.0	0.0	0.0	1,660.6	1,660.6
Net State Requirement	240.0	386.7	290.8	286.6	286.1	286.1	543.0	543.0	543.0	543.0	543.0	1,776.3	4,491.3
EOTC/MAC/Rail/RTAs Capital Spending													
Base Spending	22.6	31.5	23.0	33.0	23.0	32.5	23.0	32.5	23.0	32.5	23.0	165.6	299.6
Federal Funding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net State Requirement	22.6	31.5	23.0	33.0	23.0	32.5	23.0	32.5	23.0	32.5	23.0	165.6	299.6
TOTAL Base Capital Spending	1,320.8	2,241.6	2,122.5	1,919.0	2,325.6	2,646.5	2,394.6	1,899.6	1,456.7	1,288.5	1,241.4	12,576.1	20,856.9
Subtotal Federal Transit Funds	109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0	35.0	948.9	1,408.4
Subtotal Federal IC Funds	259.7	560.8	476.3	348.9	556.2	648.2	0.0	0.0	0.0	0.0	0.0	2,850.0	2,850.0
Subtotal Federal Non-IC Funds	280.9	475.3	369.9	337.0	383.9	404.9	0.0	0.0	0.0	0.0	0.0	2,251.9	2,251.9
TOTAL Federal Funds Available	650.0	1,200.8	1,053.0	825.1	1,081.2	1,240.5	152.3	152.1	85.2	35.0	35.0	6,050.8	6,510.4
TOTAL State Capital Requirement	670.8	1,040.7	1,069.5	1,093.9	1,244.4	1,406.0	2,242.3	1,747.5	1,371.6	1,253.5	1,206.4	6,525.3	14,346.5
Federal Share of TOTAL Base	49%	54%	50%	43%	46%	47%	6%	8%	6%	3%	3%	48%	31%
State Share of TOTAL Base	51%	46%	50%	57%	54%	53%	94%	92%	94%	97%	97%	52%	69%
MEMO: MTA "Critical Needs" (Note 6)	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	32.4	32.4	32.4	388.4	615.0

Note 1 MBTA Base Spending includes the following categories of projects: Commited, all Recapitalization, Regulatory, and Enhancements/Expansions that are SIP Commitments for the CA/THT. Spending flow from MBTA Financial Model, developed by Deloitte & Touche from data and assumptions provided by the MBTA.

Note 2 Distribution of Non-IC Funding

Agcy	% Share	Share ($)	% of Spending (FY 93 - FY 97)
MBTA	0%	0.0	0%
CA/T	30%	591.3	14%
MHD	70%	1,379.7	47%
Total	100%	1,971.0	

Note 3 Proposed Action and 8.1.D. cash flows from CA/T Project management

Note 4 The flow of Federal IC funds was estimated by taking the total anticipated appropriations for the period ($2.85 billion) 1992 to 1997 as a percentage of total capital spending for the same period, then applying the percentage to the capital cash flow for each year in the period

Note 5 MHD spending flow from MHD Financial Model, developed by Deloitte & Touche from data and assumptions provided by the MHD

Note 6 MTA spending flow assumes that the MTA's "Critical Needs" capital program goes forward as outlined in their published material. Total cost is $647 million in FY 92 dollars (assuming 3.5% inflation), 10 year program, start date in FY 90. Assumes that upon completion of the program, capital needs will be reduced by 50%

High Level Congestion Pricing Model – Assumptions

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Toll Highway Scenario

- Operational start year assumed to be 1995
- Highways tolls are two–directional
- Initial Year Volume Loss – It is assumed that, due to the impact of placing a toll on a previously untolled facility, 15% of volume will be lost in the first year of toll operations (based on CTPS "best guess")
- Price Elasticity – For every 100% increase in real toll, 8% of volume is lost (based on DeLeuw Cather assumption in Lazard Freres report)
- Modal/Route Switching – Of the volume leaving the tolled highways, it is assumed that 85% switch to secondary arterials, car pools, etc., while 15% switch to transit (based on CTPS "best guess")
- Operating cost was assumed to be $10 million/year per highway; cost growth was estimated to be 5%/year
- Debt service associated with the capital cost of toll facility construction was assumed to be $8 million/year for 30 years
- Tobin Bridge, Sumner Tunnel, THT, and Turnpike tolls and financial data assumed to remain as modelled in Scenario 2 (Fare Increases) of the MITA Debt Capacity Model
- Tolls on the "new" facilities (I–93 North, Route 2, SE Expressway) were structured to be similar to Turnpike Extension tolls in MITA Scenario 2. It is assumed that the new facilities will employ the latest Automatic Vehicle Identification (AVI) technology. No other explicit facility design assumptions were made.
- No assumptions were made regarding "peak hour pricing" or any other variable pricing structures
- It is important to note that, for the purposes of this scenario, transit fares are not the same as those modelled in MITA Scenario 2. Nominal average fares were assumed to rise with inflation.

Highway Toll Facility Cash Flow

PRELIMINARY DRAFT -- CONFIDENTIAL

Data Sources: CTPS (Traffic volumes, base growth rates)

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(Nominal $ in Millions unless otherwise indicated)	BASE	FISCAL YEARS (w/ fare increases):										5 Year	10 Year
	1993	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Cum	Cum
I-93 (North)													
Volume:													
Traffic data (millions)	52.675	52.675	52.917	45.223	45.553	45.886	46.221	46.559	46.346	46.684	47.511	242.255	475.576
Base Annual Change Rate (from prior yr)	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	1.5%		
Initial Year Volume Loss	NA	0.0%	0.0%	-15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
MEMO: Percent Change in Real Toll	NA	0.0%	0.0%	0.0%	-3.4%	-3.4%	-3.4%	-3.4%	11.5%	-3.4%	-3.4%		
Elasticity Adjustment	NA	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.3%	-0.9%	0.3%	0.3%		
Net Annual Change Rate	NA	0.5%	0.5%	-14.5%	0.7%	0.7%	0.7%	0.7%	-0.5%	0.7%	1.8%		
Volume Change due to Price Elasticity	NA	0.000	0.000	(7.974)	0.123	0.124	0.125	0.126	(0.430)	0.126	0.128	(7.727)	(7.653)
Modal/Route Switching (To)/From													
Secondary Arterials/Other	NA	0.000	0.000	(6.778)	0.104	0.105	0.106	0.107	(0.365)	0.107	0.109	(6.568)	(6.505)
Transit	NA	0.000	0.000	(1.196)	0.018	0.019	0.019	0.019	(0.064)	0.019	0.019	(1.159)	(1.148)
Net Transactions (millions)	52.675	52.675	52.917	45.223	45.553	45.886	46.221	46.559	46.346	46.684	47.511	242.255	475.576
Price:													
Nominal One Way Average Toll ($)	$0.00	$0.00	$0.00	$1.30	$1.30	$1.30	$1.30	$1.30	$1.50	$1.50	$1.50		
Real Average Toll ($ FY 92)	$0.00	$0.00	$0.00	$1.17	$1.13	$1.09	$1.06	$1.02	$1.14	$1.10	$1.06		
Nominal Revenue/Transaction ($)	$0.00	$0.00	$0.00	$1.30	$1.30	$1.30	$1.30	$1.30	$1.50	$1.50	$1.50		
Revenue (Nominal $)													
Gross Toll Revenue	0.0	0.0	0.0	58.8	59.2	59.7	60.1	60.5	69.5	70.0	71.3	177.7	509.1
Operating Cost/Debt Service	0.0	0.0	0.0	18.0	18.9	19.8	20.8	21.9	23.0	24.1	25.3	56.7	171.9
Net Revenue	0.0	0.0	0.0	40.8	40.3	39.8	39.3	38.6	46.5	45.9	45.9	120.9	337.2

Highway Toll Facility Cash Flow PRELIMINARY DRAFT -- CONFIDENTIAL

Data Sources: CTPS (Traffic volumes, base growth rates)

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(Nominal) $ in Millions unless otherwise indicated	BASE 1993	FISCAL YEARS (w/ fare increases): 1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	5 Year Cum	10 Year Cum
Rte 2/Soldier's Field Rd/Storrow Dr													
Volume:													
Traffic data (millions)	22.623	22.623	22.727	19.423	19.565	19.708	19.852	19.997	19.905	20.050	20.197	104.045	204.045
Base Annual Change Rate (from prior yr)	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%		
Initial Year Volume Loss	NA	0.0%	0.0%	-15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
MEMO: Percent Change in Real Toll	NA	0.0%	0.0%	0.0%	-3.4%	-3.4%	-3.4%	-3.4%	11.5%	-3.4%	-3.4%		
Elasticity Adjustment	NA	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.3%	-0.9%	0.3%	0.3%		
Net Annual Change Rate	NA	0.5%	0.5%	-14.5%	0.7%	0.7%	0.7%	0.7%	-0.5%	0.7%	0.7%		
Volume Change due to Price Elasticity	NA	0.000	0.000	(3.425)	0.053	0.053	0.054	0.054	(0.185)	0.054	0.054	(3.319)	(3.287)
Modal/Route Switching (To)/From													
Secondary Arterials/Other	NA	0.000	0.000	(2.911)	0.045	0.045	0.046	0.046	(0.157)	0.046	0.046	(2.821)	(2.794)
Transit	NA	0.000	0.000	(0.514)	0.008	0.008	0.008	0.008	(0.028)	0.008	0.008	(0.498)	(0.493)
Net Transactions (millions)	22.623	22.623	22.727	19.423	19.565	19.708	19.852	19.997	19.905	20.050	20.197	104.045	204.045
Price:													
Nominal Average Toll ($)	$0.00	$0.00	$0.00	$1.30	$1.30	$1.30	$1.30	$1.30	$1.50	$1.50	$1.50		
Real Average Toll ($ FY 92)	$0.00	$0.00	$0.00	$1.17	$1.13	$1.09	$1.06	$1.02	$1.14	$1.10	$1.06		
Nominal Revenue/Transaction ($)	$0.00	$0.00	$0.00	$1.30	$1.30	$1.30	$1.30	$1.30	$1.50	$1.50	$1.50		
Revenue (Nominal $)													
Gross Toll Revenue	0.0	0.0	0.0	25.2	25.4	25.6	25.8	26.0	29.9	30.1	30.3	76.3	218.3
Operating Cost/Debt Service	0.0	0.0	0.0	18.0	18.9	19.8	20.8	21.9	23.0	24.1	25.3	56.7	171.9
Net Revenue	0.0	0.0	0.0	7.2	6.5	5.8	5.0	4.1	6.9	6.0	5.0	19.6	46.4

Highway Toll Facility Cash Flow

PRELIMINARY DRAFT -- CONFIDENTIAL

Data Sources: CTPS (Traffic volumes, base growth rates)

08-Apr-92 08:02

(Nominal $ in Millions unless otherwise indicated)	BASE	FISCAL YEARS (w/ fare increases):										5 Year	10 Year
	1993	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Cum.	Cum.
Southeast Expressway (I-93 South)													
Volume:													
Traffic data (millions)	58.199	58.199	58.438	49.912	50.251	50.593	50.938	51.284	51.023	51.371	52.075	267.393	524.084
Base Annual Change Rate (from prior yr)	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	1.1%		
Initial Year Volume Loss	NA	0.0%	0.0%	-15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
MEMO: Percent Change in Real Toll	NA	0.0%	0.0%	0.0%	-3.4%	-3.4%	-3.4%	-3.4%	11.5%	-3.4%	-3.4%		
Elasticity Adjustment	NA	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.3%	-0.9%	0.3%	0.3%		
Net Annual Change Rate	NA	0.4%	0.4%	-14.6%	0.7%	0.7%	0.7%	0.7%	-0.5%	0.7%	1.4%		
Volume Change due to Price Elasticity	NA	0.000	0.000	(8.802)	0.136	0.137	0.137	0.138	(0.473)	0.139	0.141	(8.530)	(8.448)
Modal/Route Switching (To)/From													
Secondary Arterials/Other	NA	0.000	0.000	(7.481)	0.115	0.116	0.117	0.118	(0.402)	0.118	0.119	(7.250)	(7.181)
Transit	NA	0.000	0.000	(1.320)	0.020	0.020	0.021	0.021	(0.071)	0.021	0.021	(1.279)	(1.267)
Net Transactions (millions)	58.199	58.199	58.438	49.912	50.251	50.593	50.938	51.284	51.023	51.371	52.075	267.393	524.084
Price:													
Nominal Average Toll ($)	$0.00	$0.00	$0.00	$1.30	$1.30	$1.30	$1.30	$1.30	$1.50	$1.50	$1.50		
Real Average Toll ($ FY 92)	$0.00	$0.00	$0.00	$1.17	$1.13	$1.09	$1.06	$1.02	$1.14	$1.10	$1.06		
Nominal Revenue/Transaction ($)	$0.00	$0.00	$0.00	$1.30	$1.30	$1.30	$1.30	$1.30	$1.50	$1.50	$1.50		
Revenue (Nominal $)													
Gross Toll Revenue	0.0	0.0	0.0	64.9	65.3	65.8	66.2	66.7	76.5	77.1	78.1	196.0	560.6
Operating Cost/Debt Service	0.0	0.0	0.0	18.0	18.9	19.8	20.8	21.9	23.0	24.1	25.3	56.7	171.9
Net Revenue	0.0	0.0	0.0	46.9	46.4	45.9	45.4	44.8	53.6	52.9	52.8	139.2	388.7

Highway Toll Facility Cash Flow

PRELIMINARY DRAFT -- CONFIDENTIAL

Data Sources: CTPS (Traffic volumes, base growth rates)

08-Apr-92 08:02

(Nominal $ in Millions unless otherwise indicated)	BASE	FISCAL YEARS (w/ fare increases):										5 Year	10 Year
	1993	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Cum	Cum
New Toll Highway Facilities (Totals)													
Modal/Route Switching (To)/From													
Secondary Arterials/Other		0.000	0.000	(17.170)	0.265	0.266	0.268	0.270	(0.924)	0.271	0.275	(16.639)	(16.479)
Transit		0.000	0.000	(3.030)	0.047	0.047	0.047	0.048	(0.163)	0.048	0.048	(2.936)	(2.908)
Gross Toll Revenue		0.0	0.0	148.9	150.0	151.0	152.1	153.2	175.9	177.2	179.7	449.9	1,288.0
Operating Cost/Debt Service		0.0	0.0	54.0	56.7	59.5	62.5	65.6	68.9	72.4	76.0	170.2	515.7
Net Revenue		0.0	0.0	94.9	93.3	91.5	89.6	87.6	107.0	104.8	103.7	279.7	772.3
Incremental Transit Revenue Impact													
Switch (To)/From New Toll Highways		0.000	0.000	3.030	(0.047)	(0.047)	(0.047)	(0.048)	0.163	(0.048)	(0.048)	2.936	2.908
Nominal Average Fare ($)		$0.88	$0.91	$0.94	$0.98	$1.01	$1.05	$1.08	$1.12	$1.16	$1.20		
Gross Incremental Fare Revenue		0.0	0.0	2.9	(0.0)	(0.0)	(0.0)	(0.1)	0.2	(0.1)	(0.1)	2.8	2.7

Capital Budgeting

Observations about Current Capital Planning/Budgeting Process

- The capital plans of both the MBTA and the MHD are unprioritized lists of projects
    - start dates and durations of projects are not clearly defined
    - annual programs are pieced together from the project lists to fit a relatively short-term set of priorities (i.e., spending caps, political considerations)
    - annual cash flow projections and long term spending plans are not done
- Capital planners do not integrate all data available to provide a "big picture" view of their programs as a whole
- In general, the operating cost and revenue impacts of projects are not well understood
    - capital program not linked to operating projections
    - demand analysis, if it exists, is not linked to the capital program for purposes of project justification and revenue projections
- The current project prioritization process seems to favor service enhancement and expansion over maintenance of the existing system - the tendency is to defer maintenance

Capital Budgeting

Impact of Current Practices

- The yearly capital spending caps, coupled with the political weight of various projects, lead to a policy of keeping a large number of projects "alive", while stretching out their durations to control annual spending. This policy hampers cost-efficient project completion.

- The lack of a fully integrated "big picture" implies that
  - high-level program decisions are made without complete information
  - the effects of individual decisions on the whole program can not be reliably forecasted

- Because capital programs are not linked to demand analysis and operating cost impacts, there is a risk that
  - the programs do not meet the long term transportation needs of the public
  - the expense of expanding systems is not supportable

- Because maintenance tends to be deferred
  - the useful lives of existing facilities are reduced
  - old facilities require full replacement rather than refurbishment, increasing long term capital needs

Capital Budgeting

Potential Benefits From MITA

- Capability to develop long term, integrated capital programs at both the agency and inter-agency levels
- Informed, coherent, coordinated capital planning and decision-making, to be based on demonstrated long term needs rather than short term objectives
- Better integration of different modes of services
- Consolidated capital planning and budgeting, which will result in
    - more efficient project scheduling
    - coordinated obligation of Federal funds
    - coordinated efforts to maximize Massachusetts' share of Federal funds in future legislation
- Significant reduction in overall capital needs and increase in Federal resources available, if the benefits outlined above are realized

Deloitte &
Touche

Potential Debt Capacity of the Proposed Massachusetts Intermodal Transportation Authority

INTRODUCTION

The body of this report was written in early March, 1992 in response to a specific question: what is the potential incremental debt capacity available by forming the "Massachusetts Intermodal Transportation Authority" (MITA)? This question was somewhat hypothetical since an actual structure for MITA (from a financial, operational or organizational standpoint) had not been defined to any significant degree and decisions such as which organizations should form the nucleus of MITA were still being discussed. However, because of the urgency imposed due to the Commonwealth's budget cycle, the desire to submit draft enabling legislation to the current legislature session, and given a number of major organization and operating assumptions Deloitte & Touche undertook the task of developing a preliminary review of incremental MITA debt capacity.

To accomplish this, it was first necessary to make basic assumptions about MITA's structure - what agencies/departments would be incorporated, what credit structure would exist, which existing debt would be restructured, what ratings would be awarded to debt of the new credit entity, and many others. Our approach was to take the most aggressive scenario possible and assume its full implementation at the beginning of state fiscal year 1993. This allowed us to consider the most aggressive case possible as well as test a range of financial implementation issues, some of which will pertain to alternative scenarios. These include consideration of establishing a trust entity with an independent, special obligation credit, a reasonableness test of the ability to refund certain agency and highway general obligation debt, a review of the restrictions imposed by agency trust agreements, issues regarding "forward funding" of the MBTA, and others. On the basis of these assumptions, we have been able to develop this view of incremental debt capacity.

Deloitte & Touche views this report as the description of one of a number of MITA planning scenarios. The analysis focuses on testing what is feasible from a financial structuring standpoint. A range of options exist between "status quo" and the planning scenario discussed in this report. It also has been recognized from the onset of this analysis that a number of other critical non financial implementation issues need to be addressed beyond the scope of the debt

capacity question. Some of these issues will shape the ultimate financial approach selected.

PURPOSE AND BACKGROUND

Deloitte & Touche was requested to estimate the potential debt capacity of the proposed Massachusetts Intermodal Transportation Authority (MITA). Debt capacity is defined for purposes of this estimate as the incremental amount of long-term, tax-exempt indebtedness MITA would be able to issue for new capital improvement based on pledgeable revenues.

This initial assessment of debt capacity relied on certain assumptions regarding the organizational and financial structures that would be combined in whole or in part to form MITA. A number of detailed legal, tax and other issues require further research. The basis for this assessment is the MITA concept document published by EOTC in January, 1992. This evaluation is based on subsequent discussions with relevant parties and analysis in order to refine the original work and provide a preliminary estimate of incremental debt capacity. In preparing this assessment, we assumed that MITA would serve as an independent authority that would plan, fund, construct, and oversee all of the transportation services currently provided by the following agencies:

- Executive Office of Transportation and Construction (EOTC)
- Massachusetts Highway Department (MHD)
- Massachusetts Bay Transportation Authority (MBTA)
- Massachusetts Regional Transit Authorities (RTA's)
- Massachusetts Turnpike Authority (MassPike)
- Massachusetts Aeronautics Commission (MAC).

As initially conceived, MITA could operate as a "holding company" in which current Authorities and departments would continue to function much as they currently do, but as "line" operating agencies, rather than independent organizational authorities as is currently the case. The Massachusetts Port Authority (MassPort) is the only assumed exception. MassPort would continue to independently maintain and operate its facilities (with the possible exception of the Tobin Bridge) with MITA responsible for approving their operating and capital plan. "Residual" revenues, described later in this document, would flow through to MITA to support public transportation purposes in Massachusetts as approved by the MITA Board. It is with this organizational structure in mind that the question of MITA's potential debt capacity was examined.

The estimate of MITA's potential incremental debt capacity is based upon a set of assumptions regarding its financial structure. These include:

- Existing debt at various agencies and authorities can be currently or advance refunded, except as noted, enabling the dissolution of certain trust agreements which would inhibit MITA's efficient operation.

- The creation of a Public Transportation Trust Fund (the "Trust Fund")that would receive all currently generated transportation related revenues including, but not limited to, motor vehicle fuel taxes, registry fees, local assessments, tolls from the Tobin Memorial Bridge* and Third Harbor Tunnel, and operating revenues from the MassPike, MBTA, and RTAs.

- Deposit of "residual" revenues generated from the operations of the Port Authority annually into the Trust Fund. Excess revenues would be generally defined as the residual revenues after operating costs, maintenance costs, and debt service on current or future required capital improvement bonds are paid. Additionally, current restrictions on the use of funds could be reduced, thereby allowing greater discretion by MITA in the use of excess funds.

- Structuring the Trust Fund in a manner that would secure its independence from the State's General Fund and allow it to secure bonds issued by MITA for general public transportation purposes, including future debt issued by the MBTA and other agencies.

- Maintaining MassPort's authority to issue its own long-term capital improvement bonds secured by revenues that are largely restricted to airport related uses such as landing fees, thus enabling MassPort to continue to maintain its current credit rating and structure.

- MITA and the Trust Fund would be established and operating by July 1, 1992.

METHODOLOGY

Development of the MITA debt capacity estimate required the sequential completion of the following analytical tasks:

1) A financial and legal evaluation of the current outstanding indebtedness incurred by each of the proposed constituent agencies.

2) An estimation of debt service requirements on any refunding bonds and new debt.

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* Section 714 of the Trust Agreement securing MassPort's bonds addresses the issue of disposing of major assets owned by MassPort and may affect the ability to separate the Tobin Memorial Bridge from MassPort.

3) An estimation of revenues available to MITA that could be used to support existing or future debt.

4) An estimation of additional debt that could be incurred by MITA for new capital requirements.

5) An preliminary estimation of the rate of growth in revenues and operating expenses of the agencies that will compose MITA for new capital requirements.

The following sections discuss each of the above tasks.

1. Evaluation of Outstanding Indebtedness

Analyses of the current outstanding indebtedness carried by the Turnpike Authority, the Port Authority, the Massachusetts Bay Transportation Authority and the Massachusetts Highway Department are presented below. Exhibit A contains a summary of each of the outstanding issues by agency.

Massachusetts Turnpike Authority

The State created the Authority in 1952 for the express purpose of constructing, maintaining and operating a toll highway from Boston to the western boundary of the State (the Initial Turnpike).

Construction of the Initial Turnpike (which terminated west of Boston at Route 128) was financed by two bond issues under a Trust Agreement dated May 1, 1954. The construction of the Boston Extension (from Route 128 to downtown Boston) was financed under a Supplemental Trust Agreement.

The Supplemental Trust Agreement provides for the creation of a special fund, the Massachusetts Turnpike Interest and Sinking Fund. This fund is pledged to and charged with the payment of principal, redemption price, if any, and interest on the bonds. All tolls and other revenues of the Turnpike net of expenses for maintenance, repair and operation and deposits to the Replacement Reserve Fund established under the Supplemental Trust Agreement for such purposes, are pledged and transferred to the Interest and Sinking Fund.

The Supplemental Trust Agreement requires that funds in the Replacement Reserve Fund must be used:

> *". . . for the purpose of paying the cost of resurfacing, replacing or reconstructing the Boston Extension or any part thereof, the cost of unusual or extraordinary maintenance or repairs, renewals and replacements, the cost of replacing equipment, engineering expenses in connection with the same and premiums on insurance carried under this agreement, and shall be disbursed only for such purposes."*

While protecting existing bond holders' interests, the broad definition of activities which must be funded from the Replacement Reserve Fund pursuant to the Trust Agreement may constrain the Authority's (and MITA's) discretion in the future in determining whether to finance certain activities on a cash basis or through debt financing. For this reason it is advisable that all currently outstanding bonds issued under the Supplemental Trust Agreement be advance refunded in order to restructure a trust agreement which allows the Turnpike (and MITA) more discretion in the use of debt financing.

Initial analysis indicates that although an advance refunding of certain issues of the Turnpike's bonds may result in "low to high" refundings (i.e. 1962 Revenue Bonds), these will be largely offset by certain "high to low" refundings (i.e. 1990 Tunnel Repair Revenue Bonds) and potential use of tender offers. We assume, on balance, that only the costs of issuance would be incurred in such a refunding.

Massachusetts Port Authority

The Port Authority was created by the State in 1956. The Authority currently operates and manages airport properties, consisting of Boston-Logan International Airport and Lawrence Hanscom Field, the Maurice Tobin Memorial Bridge and port properties and facilities in the Port of Boston along with certain other properties.

The Authority has four series of revenue bonds outstanding. (See Exhibit A.) These are referred to as the 1978 Bonds, 1985 Bonds, 1988 Bonds and the 1990 Bonds. All bonds are secured by a pledge of the Authority's revenues which consist of all tolls, rates, fees, rentals, and any other investment income or charges the Authority may receive. (In order to satisfy certain conditions of a tax ruling obtained in connection with the 1978 refunding plan, the 1978 Bonds were structured as limited obligations of the Authority). The bonds are also secured by a lien and charge on all funds and accounts created under the 1978 Trust Agreement prepared with the issuance of the 1978 Bonds. All subsequent issues were also issued under the 1978 Trust Agreement.

Under the 1978 Trust Agreement, all revenues stemming from airport operations, bridge tolls and port properties are deposited into a Revenue Fund (with the exception of the 1978 Pledged Revenues which are transferred to the Operating Fund once debt service on the 1978 Bonds is paid). The Revenue Fund balances are transferred as frequently as practical to the Operating Fund from which operating expenses are paid. Excess revenues after paying operating expenses flow to the Interest and Sinking Fund which applies payments to the 1985, 1988 and 1990 Bonds.

Relatively small amounts of remaining revenues are then transferred sequentially to the Maintenance Reserve Fund and the Payment in Lieu of

Taxes Fund. Lastly, all remaining balances in the Operating Fund are transferred to the Improvement and Extension Fund. Monies in this fund may be used for any lawful purpose including capital expenditures.

Based on initial discussions, Deloitte & Touche believes that certain of the Authority's outstanding bonds are not subject to optional call provisions. Only the 1978 Bonds are refundable and can be currently refunded on July 1, 1992 at 101.5 percent of par value. The remaining bonds are not yet subject to optional call and cannot be advance refunded. As was discussed in page 2 of this report, there are certain legal issues which may arise from the Trust Agreement regarding the potential separation of the Tobin Bridge. These potential issues are currently being researched.

Massachusetts Bay Transportation Authority

The Massachusetts Bay Transportation Authority (MBTA) operates rapid transit rail, bus and commuter rail service for an area of eastern Massachusetts with a population of approximately 2.6 million.

Both the Commonwealth and member cities and towns are required to fund the annual operating deficit (defined as the "Net Cost of Service"), pursuant to Chapter 161A and other related statutes, referred to henceforth as the Act. The Commonwealth, in addition to funding a portion of the operating deficit, also directly funds 90% of the annual debt service of the MBTA, pursuant to the provisions of the Act. The remaining 10% is funded in the MBTA operating budget.

The Commonwealth is legally obligated to pay debt service on MBTA bonds and notes if at any time the MBTA is unable to meet these payment requirements. Since MBTA debt is secured by the full faith and credit of the State, it carries the same credit rating as the State and affects the State's future debt capacity.

As can be seen from Exhibit A, outstanding long-term debt issued by the MBTA is estimated at $1.75 billion. Current debt service on some 22 issues that constitute this debt is estimated at $157.0 million in 1992. If no additional debt were issued beyond the 1991 Series A bonds, annual cumulative debt service would peak at an estimated $163.0 million on a cash basis. In addition, the MBTA carries approximately $171.0 million of other long term obligations and short term debt of $357.0 million. The State Treasury has also advanced funds through both cash advances and the issuance of short-term notes to assist the MBTA and RTA's in meeting their operating expense needs during the 18 month period between the time of incurring the expenses and reimbursement from the State and the local assessments. Refunding MBTA debt incorporates these obligations along with an amount to meet the operating requirements in a year of transition to facilitate a "forward funding" basis for the MBTA.

Under the proposed MITA financial structure, a Trust Fund would be created which would collect all currently available revenues from the existing Highway Fund, local assessments and operating revenues. Under this structure, the general obligation debt issued on behalf of or held by the MBTA would be restructured as special obligation debt secured by the Trust Fund.

Based on our discussions, it appears that all of the outstanding debt can be advance refunded with the exception of a portion of the 1987 Series A Refunding Bonds. These bonds have been refunded once and cannot be further refunded under the provisions of the 1986 Tax Act. The amount of these bonds is estimated at $58.3 million. These bonds would remain as general obligations at least until their first call date at which time MITA would assume debt service requirements.

Massachusetts Highway Department

The Massachusetts Highway Department (formerly the Department of Public Works) funds its capital program by participating in general obligation debt issued by the State. Current outstanding debt is estimated at $1.57 billion.

For the purposes of this evaluation, we have assumed that portions of state general obligation debt can be advance refunded, converting Highway Fund debt to a special obligation of the Trust Fund.

Since the Highway Department debt is combined with general state bonding, technical issues regarding how the debt could be specifically refunded have not been addressed at this point.

2. Estimation of Revised Debt Service Requirements

In the table below a revised schedule of debt service requirements is summarized based on the refunding assumptions discussed in the previous section.

Table 1
Estimated Annual Debt Service Requirements
($millions)

	Issuing Authority				
Year	**MHD**	**MBTA**	**MassPort**	**MassPike**	**Total**
1993	$130	$250	$43	$37	$460
1994	130	250	43	37	460
1995	130	250	43	37	460
1996	130	250	43	37	460
1997	130	250	43	37	460

The MBTA and Massachusetts Highway Department general obligation debt is assumed to be refunded using 30 year level debt service MITA bonds at an average coupon rate of approximately 7.3 percent. It should be noted that this interest rate reflects current market conditions. Actual rates at the time of this refunding could vary significantly. In the case of MBTA, all currently outstanding long-term bonds, Certificates of Participation, short term notes and amounts necessary to fund previous years net cost of service requirements were assumed to be refunded. We believe this financing would allow the MBTA to convert their present budgeting and funding process from a "net-cost-of service" method to a "forward funding" method thereby relieving much of the currently outstanding State general obligation debt.

In addressing the Massachusetts Highway Department general obligation debt, we estimated that $1.57 billion in currently outstanding bonds would be called and refunded using 30 year level debt service MITA bonds at the same 7.3 percent coupon. As with the refunded MBTA debt, we assumed that bond proceeds would include a Debt Service Reserve Fund consisting of one-year's principal and interest payment. We further assumed that in moving from a general obligation credit secured by the Commonwealth to a "special obligation" credit secured by a gross lien on all Trust Fund revenues, we would improve the rating on the bonds to an "A" rating from the current "Baa". The combination of an improved rating, along with the act of refinancing the existing debt over 30 years, results in significant current savings over existing debt service. However, on a present value basis a loss does occur on both refundings because of longer maturity. The cost of issuance was assumed to be approximately one percent on each refunding.

In looking at existing MassPort and MassPike debt, we assumed that no significant savings or costs would be incurred on these respective refundings beyond the initial cost of issuance. The primary reason for refunding this debt is to nullify existing trust agreements which would inhibit the formation of an independent MITA credit authority. As discussed above, investigations to date indicate that only the 1978 Bonds issued by the Port Authority can be currently called. Preliminarily, we believe that all of the MassPike debt can be advance refunded either for some savings or at a cost no greater than the cost of issuance of the refunded bonds. Therefore, annual debt service requirements are expected to remain substantially the same as current levels.

3. Estimation of Revenues Available to MITA

In order to estimate potential revenues that may be used to support additional debt capacity of MITA, a "high level" pro forma cash-flow statement for MITA during the State fiscal years 1993 through 1997 was developed. This cash flow statement is included as Exhibit B to this report.

The beginning fund balance is estimated at $57 million based on the amount forecasted by the State to be remaining in the Highway Fund at the

conclusion of the FY 1992. Once established through enabling legislation, the Trust Fund would serve as the exclusive depository for all funds currently collected and managed within the Highway Fund including the Highway Funds portion of the Cigarette Tax.

In addition to current Highway Fund revenues, the Trust Fund would receive Local Assessments from the cities and towns comprising the MBTA and RTA service districts, operating revenues from both the MBTA and RTA's, net toll revenues from the Tobin Bridge (see previous footnote on page 2) and Third Harbor Tunnel when it becomes operational, toll and other revenue from the Massachusetts Turnpike, and federal operating (Section 9) assistance that is currently received by both the MBTA and RTA's.

The Trust Fund could also receive certain unrestricted revenues from MassPort that remain once their operations and the debt service on outstanding bonds have been paid. Restrictions on the use of airport use generated revenues for related purposes will be closely followed. However, approximately 20% of estimated net revenue (after debt service and all operating expenses are paid) has been assumed to become available to the Trust Fund. This assumption also presumes that MassPort significantly augments its revenue during the next several years through the institution of Passenger Facility Charges.

Lastly, the cash flow statement assumes that the Commonwealth will match the current level of local assessments to fund the operating deficits of the MBTA and RTA's. Under the current proposal for the creation of MITA, local assessments will remain at $134 million; hence, the State match of an equal amount. These amounts are escalated at 2.5 % per year as per the requirements of Proposition 2-1/2.

Trust Fund expenses are generally based on FY 1992 planned expenditures. When operational, many of the common administrative support, financial and planning functions will be consolidated into MITA and performed by MITA personnel, as opposed to those staff remaining with the line operating agencies. Specific operational impacts regarding this consolidation have not been determined nor addressed in the annual expenses. Instead, the expenses for each agency reflect FY 1992 plans. Operating efficiencies related to improved productivity and coordination have been programmed starting in 1994.

Fifteen percent of the Motor Fuel Tax is reserved for local aid. This consists of 7.5% in operating support which is explicitly shown in the cash flow expense. The 7.5% allocated for capital funding is assumed to be provided by the incremental MITA debt capacity.

As a last item, refunded debt service on the MBTA, Department of Highway and MassPike is also included as an annual expense item. Based on the assumptions underlying each of the anticipated revenues and expenses, the pro forma cash flow indicates that an estimated $1.2 billion (Base Case

Scenario) will be available to support additional debt in the initial five years of MITA operations. However, this number assumes that no new debt, beyond the $1.2 billion, is issued. This assumption may be unrealistic since each MITA operating entity has a significant capital spending programs which must be funded. It does, however, provide the basis for estimating the incremental debt capacity available to the Trust Fund over time.

A brief explanation of the derivation and assumptions underlying each of the line items presented in Exhibit B is included with the exhibit.

4. Estimate of Additional Debt Capacity of MITA

Estimating an amount of additional debt that could be supported by the Public Transportation Trust Fund depends on a number of, as yet, undetermined factors which impact both credit quality and market access. These include:

- Are the revenues that are assumed to be deposited into the Trust Fund irrevocably dedicated to the Trust Fund to pay debt service on special obligation bonds and other transportation requirements?
- Are there circumstances under which such revenues could be diverted?
- Will debt service be secured by a gross first lien pledge or on a pledge of net revenues after operations?
- How will MITA and the Trust Fund be managed?
- To what degree can other additional expenses be added to those that are assumed to be paid from the Trust Fund?

Future financings by MITA will be secured by a "gross lien or pledge" on all revenues dedicated to MITA which should provide adequate coverage consistent with other highly rated state transportation agencies. However, we leave open the possibility of special revenue supported debt (i.e., segregated credits within the overall Trust Fund) as part of the overall MITA debt structure.

Table 2
Estimated Incremental Debt Capacity Range
($ millions)

Fiscal Year	Amount
1993	$900
1994	300
1995	–
1996	–
1997	–

Other assumptions incorporated in the annual incremental debt capacity numbers are included in Exhibit B.

5. Potential Impact on State Credit

Aside from the anticipated financial savings that will be attributable to converting the current general obligation debt to special obligation debt, there will be a significant, but as yet unquantified, potential benefit to the State of Massachusetts on both the remaining debt currently carried on the State's books and future debt the State may issue. By securing both the outstanding Highway and MBTA debt with Trust Fund revenues, the State's outstanding general obligation debt may be reduced by as much as 40 percent. Reducing outstanding debt by this amount may well improve the quality of the State's credit as determined by the rating agencies. However, any improvement in the State's credit rating, and a resultant reduction in the interest rates the Commonwealth would pay on their bonds, may well have to wait until the rating agencies view subsequent uses of expanded general obligation debt capacity and gain confidence that the Trust Fund is actually independent and inviolable. Obviously, the stronger the independence the greater the likelihood MITA issued and secured debt will carry a strong rating as well as potentially enhance the State's credit rating.

NEXT STEPS

The next steps for EOTC arising as a result of this memorandum are:

1. Structure/discuss alternative financial, operating and organizational structures with relevant state individuals (including Administration and Finance, Executive Office, etc.)

    a. Ensure a consistent fact set is developed, differences between state budget assumptions and memorandum assumptions are clearly understood and refine view of incremental debt capacity.

2. Match state transportation capital needs against potential scenarios:

    a. Refine capital spending plans of agencies and departments

    b. Identify issues regarding federal resources available and likelihood of receiving

    c. Identify "gap" and determine potential to close under alternative scenarios

3. Determine legal feasibility and legislative implications of options - assess political feasibility.

4. Select a preferred option, refine structural view, and draft and submit enabling legislation.

Exhibit A
CURRENT OUTSTANDING DEBT

1) MASSACHUSETTS TURNPIKE AUTHORITY

Description	Date of Final Maturity	Approximate Ave. Interest Rate	Bonds Outstanding ($000)
1962 Rev. Bonds (Series A)	01/01/2002	4.750%	$84,816
1962 Rev. Bonds (Series A)	01/11/2002	4.150	32,243
1986 Rev. Bonds (Imp. Bonds)	01/11/2025	6.750	17,135
1986 Rev. Bonds (Imp. Bonds)	01/20/2026	7.125	18,000
1990 Tunnel Rev. Bonds (MIFA)	10/01/2020	9.000	46,600
TOTAL OUTSTANDING			$198,794

2) MASSACHUSETTS PORT AUTHORITY

Description	Date of Final Maturity	Interest Rates[1]	Bonds Outstanding ($000)
Series 1978	7/01/2018	6.5 - 7.125%	$198,665
Series 1985 (A&B)	7/01/2015	7.5 - 9.375	70,980
Series 1988-A	7/01/2018	6.35 - 7.75	98,760
Series I990-A	7/01/2020	6.5 - 7.5	90,935
TOTAL OUTSTANDING			$459,340

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[1] First rate is interest rate on Serial Bonds maturing on various dates. Second rate is interest rate on Term Bonds in final year of maturity.

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Exhibit A
CURRENT OUTSTANDING DEBT
(Continued)

3) MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

A) General Transportation System Bonds

Description/Issue Date		Date of Maturity	Approximate Ave. Interest Rate	Bonds Outstanding[1] ($000)
1967	Series A (3/1/67)	2007	3.82%	$ 41,600
1970	Series A (9/1/70)	2010	6.50	29,165
1972	Series A (9/1/72)	2012	5.24	18,065
1974	Series A (6/1/74)	2014	6.22	40,800
1977	Series A (9/1/77)	2017	5.83	48,410
1979	Series A (5/1/79)	2019	6.63	39,600
1982	Series A (4/1/82)	2005	8.96 [2]	12,900
1983	Series A (3/15/83)	2008	7.06	37,025
1983	Series A (8/15/83) Refunding Bonds	2004	5.61	9,850
1984	Series A (11/1/84) Variable Rate	2014	5.73	82,295
1985	Series A (8/2/85)	2006	6.91	21,710
1986	Series A (4/1/86)	2011	6.89	90,770
1986	Series A (4/15/86) Refunding Bonds	2005	7.02	134,690
1987	Series A (3/1/87)	2017	6.22	48,400
1987	Series A (3/1/87) Refunding Bonds	2006	6.08	68,055
1987	Series C (7/15/87)	2012	7.41	46,330
1988	Series A (3/15/88)	2013	7.53	104,555
1989	Series A (5/15/89)	2014	7.10	169,150
1990	Series A (4/1/90)	2015	7.60	202,110
1990	Series B (12/1/90)	2021	7.81	230,000
1991	Series A (11/15/91)	2022	7.09	275,000
	TOTAL OUTSTANDING SYSTEM BONDS			$1,750,480

---

[1] As of 12/31/91

[2] Assumes zero coupons included in this rate.

Exhibit A
CURRENT OUTSTANDING DEBT
(Continued)

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

B) Other Long-Term MBTA Obligations:

As of December 31, 1991, the MBTA carried the following additional outstanding obligations:

Boston Metropolitan District Bonds[1]	$ 60,737,928 (principal only)
Certificates of Participation	110,475,000

C) Short-Term Obligations $(000s)

The MBTA's current short-term debt obligations are:

Notes:

Current Expense (Series B)	$ 175,000 (Due 3/02/92)
Current Expense (Series D&E)	160,000 (Due 10/01/92)

Commercial Paper	$22,000

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[1] Principal amount matures in 2024. If carried to maturity the BMD issues will incur interest payments estimated at $18,182,540. This amount excludes interest on BMD bonds held for the City of Boston.

Exhibit A
CURRENT OUTSTANDING DEBT
(Continued)

4) MASSACHUSETTS HIGHWAY DEPARTMENT

A) Outstanding obligations ($ millions):

Description		Principal	Discount	Total Interest	Total
1972	C. 765	64.6	0.0	14.4	79.0
1973	C. 1140	3.5	0.0	0.5	4.0
1974	C. 519	2.9	0.0	0.6	3.5
1975	C. 859	32.7	0.0	6.8	39.5
1976	C. 481 (Negligible)	-	-	-	-
1978	C. 920 (Negligible)	-	-	-	-
1977	C. 356	85.3	1.3	25.7	112.3
1979	C. 798 S15	0.4	0.0	-	0.4
1979	C. 480	53.9	1.4	19.4	74.7
1980	C. 859	0.6	0.0	0.6	1.2
1975	C. 859	6.5	0.0	2.3	8.8
1975	C. 859	3.4	0.0	1.0	4.4
1981	C. 732	121.2	9.5	57.4	188.0
1982	C. 335	57.2	0.0	30.1	87.3
1983	C. 637	228.2	3.5	141.0	372.7
1983	C. 637	1.2	0.0	1.0	2.2
1983	C. 723	1.0	0.0	0.3	1.3
1983	C. 723	0.1	0.0	-	0.1
1983	C. 723	4.8	0.0	4.4	9.2
1985	C. 811 S9	421.5	2.3	277.2	701.0
	A85	1.5	0.0	0.1	1.6
1987	C. 199 S128	0.1	0.0	-	0.1
1987	C. 199 S130	1.6	0.0	0.6	2.2
1987	C. 199 S132	0.1	0.0	-	0.1
1987	C. 303 S26	0.1	0.0	0.1	0.2
1988	C. 208 S11	40.9	0.0	50.6	91.5
1988	C. 15 S14	13.2	0.0	6.1	19.3
1988	C. 15 S10	256.3	158.5	286.7	701.6
TOTAL		1,402.8	176.5	926.9	2,506.2

B) Authorized and Unissued:

Total Funds: $1,208,747,059

- Excludes December, 1991 GO issue and refunded issues.

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REPORT ON LEGAL CONSIDERATIONS IN ESTABLISHMENT OF MASSACHUSETTS INTERMONAL TRANSPORTATION AUTHORITY

March 11, 1992

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APPENDICES:

1. McDermott, Will & Emery Summary of Massachusetts Turnpike Authority and Massachusetts Port Authority Statutes

2. McDermott, Will & Emery Summary of Massachusetts statutes directly related to Department of Public Works, Massachusetts Bay Transit Authority and Regional Transporation Authorities

Introduction

It has been proposed that several independent transportation authorities be consolidated into a single agency known as the Massachusetts Intermodal Transportation Authority ("MITA"). The Massachusetts Turnpike Authority ("Masspike"), the Massachusetts Port Authority ("Massport"), the Massachusetts Bay Transit Authority ("MBTA") and the Regional Transit Authorities ("RTAS") are among the authorities proposed to be included in MITA. The consolidation of the aforementioned authorities (the "Authorities") will be included in a plan of reorganization submitted to the General Court pursuant to Article LXXXVII of the Constitution of the Commonwealth of Massachusetts.

This memorandum has a two-fold purpose. The first is to identify significant issues which must be addressed in order to affect the consolidation of the Authorities into MITA. The second purpose is to offer resolutions to these issues which are consistent with Massachusetts law and practice and which further the objectives of the consolidation. In addition to the issues identified in this memorandum, there are many other aspects of the structure and operation of each Authority which can be considered for reorganization, or can be incorporated in its current form in the MITA enabling legislation.

The conclusions set forth in this memorandum are based on a review of applicable provisions of the Massachusetts constitution and statutes. These conclusions may be affected by the representations, covenants and obligations of each authority contained in financing documents and other contracts to which the Authorities are a party. Except for a few illustrative financing documents, no contracts were reviewed in connection with the preparation of this memorandum.

II. MITA As An Independent Authority Or Executive Department

MITA may be organized as an independent, self-supporting authority similar to Masspike and Massport or it may be organized as an executive department of the Commonwealth. If MITA is an independent authority, it may establish and be responsible for its own budgetary and appropriation process. If MITA is an executive department of the Commonwealth or if it receives funds from the Commonwealth, it will be subject to the Commonwealth's budgetary and appropriation process and the issuance of its bonds may be subject to the Commonwealth's normal review and approval process for bonds.

III. Outstanding Financings

Masspike and Massport have outstanding revenue bond issues. We have reviewed a portion of the documentation for one bond issue for each Authority. On the basis of our review of the aforementioned bond documentation, it appears that both Authorities issued revenue bonds pursuant to master trust agreements which may or may not be supplemented at the time each series of bonds is issued. The master trust agreement should provide the basic terms and conditions affecting the bonds, including any sinking funds or debt coverage ratios which each Authority must maintain. Masspike and Massport are authorized to refund their outstanding revenue bonds. It is unknown if these Authorities have any other type of outstanding obligations.

No documentation for RTA bonds has been reviewed. It is unknown what restrictions, if any, would affect the redemption of RTA bonds.

The MBTA has a wide range of outstanding financings, including bonds and leases. Many, if not all of the MBTA's financial obligations, are guaranteed in whole or in part by the Commonwealth. The MBTA is currently prohibited by statute from issuing new bonds after January 1, 1992 to redeem outstanding obligations. This effectively prohibits the MBTA from refinancing its existing indebtedness. The total amount of MBTA bonds which may be outstanding at any one time is statutorily limited to $3,178,300,000.

The enabling legislation for MITA should permit Massport and Masspike to redeem all of their respective outstanding revenue bond obligations with either a single MITA refunding revenue bond obligation or two MITA refunding revenue bond obligations, one for each of the Authorities. The reserves currently maintained to secure outstanding revenue bonds may be used to redeem the outstanding bonds or may be transferred to the MITA general fund if the refunding issue is large enough to retire the outstanding bonds in full. The bond documents for the MITA refunding bonds should permit revenues in excess of amounts necessary to pay the costs of operation and debt service on the bonds to be used to support other MITA financings or MITA's general operations. The application of excess revenues is described more fully in the section titled "Excess Revenues."

The financial obligations of the Commonwealth and the nature of the MITA financings will be directly affected by whether the MITA enabling legislation changes the current prohibition on the refinancing of existing MBTA obligations.

If the enabling legislation does not change the limitations on the refinancing of MBTA bonds, the existing bonds can be retired only by paying them off as opposed to refinancing them and MITA bonds can be issued only for new MBTA capital projects. Under the scenario, the Commonwealth would remain legally liable for the difference between the debt service on MBTA obligations and MBTA funds available to pay debt service; however, excess revenues from other divisions within MITA may be available to reduce the amount the Commonwealth is actually required to pay in connection with the MBTA bonds. The possible limitation on the use of the excess revenues of one division within MITA to support another division is discussed in the section titled "Excess Revenues."

If the enabling legislation changes the existing statutes so as to permit the refunding of outstanding MBTA bonds, MITA revenue bonds may be issued to redeem MBTA bonds. Under this scenario, the enabling legislation should also provide that the MITA bonds refunding the MBTA bonds will not be supported by the credit of the Commonwealth. The proceeds of the MITA bonds either would be used to redeem the outstanding bonds immediately or would be deposited in an escrow account dedicated to redeeming the bonds at the earliest possible date. Either application of the bond proceeds should permit the restrictions, if any, on the transfer of MBTA property in MBTA bond documents to be set aside and the transfer of MBTA properties to MITA would not be prevented by outstanding MBTA bonds.

IV. MITA Bonds

The MITA bonds should be revenue bonds payable from the revenues of the divisions within MITA. The bonds should not be supported by a pledge of MITA's assets or the Commonwealth's credit unless the Commonwealth, at its option, elects to extend its credit to enhance the financiability of specific issues

Masspike and Massport have demonstrated the ability to issue MITA type bonds. To issue MITA bonds for the MBTA it may be necessary to demonstrate that MBTA's revenues together with excess revenues from the other MITA divisions will be sufficient to meet the debt service on the bonds.

If MITA is an independent authority, the bonds will not be subject to the review or approval of any agency other than MITA. If MITA is a department within the Commonwealth, the MITA bonds may be subject to the review and approval process applicable to other revenue bonds of the Commonwealth. MITA should be authorized to set fees for use of its services sufficient to pay debt service on its bonds.

V. Excess Revenues

A. Current Statutory Requirements

Masspike revenues are applied as follows:

1) Tolls and other revenues except as noted hereinafter are applied first to pay maintenance, repair and operation expenses and to provide reserves therefor. The balance is paid into a sinking fund for debt service on outstanding bonds.

2) Payments for the lease of land, not needed for Masspike operations, are applied first to the payment of operating expenses and then to any deposits to a sinking fund required by a trust agreement related to outstanding bonds. The balance is deposited in the Commonwealth's Highway Trust Fund.

The toll revenues of Massport are applied first to pay operating expenses and debt service on the outstanding bonds. Toll revenues in excess of these requirements are applied to the obligation to reimburse the Commonwealth for costs it incurred prior to the transfer of properties to Massport or to pay for new capital improvements.

The MBTA operates at a loss and therefore there are no excess revenues to be applied. It is unknown if the RTAS have any excess revenues.

B. Requirements Under MITA Enabling Legislation

The enabling legislation for MITA should provide for revenues of each division within MITA in excess of that division's operating costs to be applied in one of the following two ways.

1) A single sinking fund will be established to which all revenues in excess of operating expenses will be deposited. Funds in the sinking fund will be available to service all debt obligations of MITA.

2) A sinking fund will be established for each division. Revenues from each division's activities will be deposited in the respective sinking fund to the extent

necessary to meet the division's current year debt service obligations. The excess revenues of each division will be transferred to MITA's general fund.

C. Limitations On Use Of Excess Revenues

If the fees charged by MITA are deemed to be a tax, the tax must be approved by popular referendum or by the General Court. If the fees charged by MITA are treated as fees, MITA can be empowered in the enabling legislation to set its fees without review or approval by any other authority or department within the Commonwealth.

In Emerson College v. Boston 391 MA 415 (1984), the Massachusetts Supreme Judicial Court set forth the criteria for distinguishing between a tax and a fee. The criteria include the requirement that the fee is collected, not to raise revenues, but to compensate the government for its expense. Article LXXVIII of the Massachusetts Constitution permits revenues from one transportation mode to be applied to another transportation mode. Amendment LXXVIII provides that fees collected for use of the highways may be used for mass transportation and highway purposes as the General Court may direct. Amendment LXXVIII has not been challenged on the grounds that the use of highway fees to support mass transit constitutes an unauthorized tax. The resolution of whether a fee constitutes a tax can be very fact sensitive. The determination of whether the use of highway fees for a mass transit project constitutes a tax may turn on the specific facts of the transaction.

The use of revenues from one division of MITA to support the activities of another MITA division may be subject to challenge as an unauthorized tax. To best defend the merging of MITA revenues to support all of its activities, the MITA enabling legislation should be drafted with careful attention to demonstrating the interrelationship among the transportation modes.

Revenues from Logan Airport are currently used to support non-airport related activities of Massport. There are federal restrictions on the use of airport revenues to support non-airport related functions. A determination must be made if the creation of MITA will make these federal restrictions applicable to Logan Airport revenues in situations to which they are not currently applicable.

VI. Ratemaking

Masspike and Massport are authorized to set the tolls for use of their facilities. Their ratemaking authority is not subject to supervision or regulation by any department, division or commission of the Commonwealth.

The MBTA is authorized to set the fees for use of its services subject to certain statutory restrictions on the nature of the fare structure. Changes in the fee rates normally must be approved by the MBTA's advisory board which is comprised of representatives from each of the cities and towns served by the MBTA.

The enabling legislation for MITA should require MITA to set fees sufficient to meet the operating costs and debt service requirements of the agency as a whole without distinguishing between divisions within MITA. MITA's ratemaking authority should not be subject to review or approval by another department or agency of the Commonwealth.

VII. Pledge of Properties

All of the Authorities are currently prohibited from pledging their properties, but not their revenues, to secure their bonds. The enabling legislation for MITA should contain a similar provision.

VIII. Transfer of Properties to MITA

The properties of Masspike and Massport are to be transferred to the Commonwealth upon the occurrence of certain events specified in the statute including payment of all outstanding bonds and the funding of the pension funds of each of the Authorities.

The enabling legislation for MITA should contain similar provisions for the transfer of the Masspike and Massport properties to MITA. Further research must be done before it can be determined if the properties of the MBTA and RTAS can be transferred to MITA before all of their bonds and other financial obligations are retired. If the MBTA and RTAS properties cannot be immediately transferred to MITA, it may be possible to lease the properties to MITA or to make them available to MITA in connection with its performance of a multi-year operating contract with the MBTA and/or the RTAS.

IX. Other Issues

Each of the Authorities has many rights, powers, obligations and responsibilities (collectively "Powers") which have not been discussed in this memorandum. It may be possible to transfer these Powers to MITA in their totality. Before such a transfer is made, it would be advisable to review each of these Powers to confirm that as they currently exist, they satisfy the purposes and objectives of MITA.

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SUMMARY OF
MASSACHUSETTS TURNPIKE AUTHORITY
AND
MASSACHUSETTS PORT AUTHORITY
STATUTES

McDermott, Will & Emery
1850 K Street, N.W.
Suite 500
Washington, D.C. 20006

MEMORANDUM

TO: Roger D. Feldman DATE: February 25, 1992
Thomas M. Ingoldsby

FROM: Karen A. Dewis KAD

RE: Massport and Masspike

MASSACHUSETTS TURNPIKE AUTHORITY

I. Introduction

The Massachusetts Turnpike Authority (the "Authority") is a self-contained, special purpose entity which is authorized to: (i) construct, maintain, repair and operate a toll express highway ("Masspike") at such location as may be approved by the State Department of Public Works ("DPW"), and (ii) to issue turnpike revenue bonds of the authority, payable solely from revenues, to finance Masspike. Mass. Gen. Laws C. 81, App. (the "Act"), § 1-1. The Authority is a body politic within DPW which is not subject to the supervision and regulation of DPW or of any other department, commission board, bureau or agency except to the extent provided in the Act. § 1-3.

The word "Authority" is defined to include any board, body or commission succeeding to the principal functions of the Authority, if the Authority is abolished, or any board, body or commission to whom the powers granted by the Act shall be given by law. § 1-4(a).

The Authority consists of three members appointed by the Governor with the advice and consent of the council. The Governor designates one of the members as Chairman until his term expires, at which time the Governor appoints a new Chairman. The term of each member is eight years and any

member is eligible for reappointment. The Authority elects one of the members as Vice Chairman and also elects a Secretary/Treasurer who need not be a member of the Authority. The Act provides for indemnification of members, officers and former employees.§ 1-3.

The Authority has power to:

a. adopt bylaws;

b. adopt official seal;

c. maintain offices;

d. sue and be sued;

e. construct, reconstruct, maintain and operate the turnpike;

f. acquire land abutting the turnpike and construct or contract for the construction of buildings and appurtenances for gasoline stations, restaurants and other services and lease the same for the above purposes;

g. issue turnpike revenue bonds for any of its corporate purposes payable solely from the tolls and revenues pledged for their payment, and refund such bonds;

h. fix, revise, charge and collect tolls for transit over the turnpike;

i. establish rules and regulations for the use of the turnpike;

j. acquire, hold and dispose of real and personal property;

k. exercise the power of eminent domain to acquire public lands or private property in the name of the Authority by purchase or otherwise;

l. control ingress and egress from the turnpike;

m. make and enter into all contracts and agreements necessary or incidental to the performance of its duties and exercise of its powers under the

act, subject to §§ 26-29 and 44(a)-44(1) of Mass. Gen. Laws c. 149, and §§ 39(f)-39(m) of Mass. Gen. Laws c. 30. Notwithstanding any general or special law, the Authority may award contracts for emergency repairs without competitive bids, with the approval of the Secretary of Transportation and Construction or his Designee.

n. employ engineers, attorneys and other agents;

o. receive and accept federal grants for or in the aid of construction of the turnpike and receive and accept aid or contributions from any source to be held, used and applied for the purposes for which such grants and contributions may be made;

p. do all acts and things necessary and convenient to carry out the powers expressly granted in the Act;

q. any sale of real property (except for real property sold by the Authority to the Commonwealth or any city, town or public instrumentality, or the sale of real property that has a fair market value of less than $5,000) must be made pursuant to competitive bids. § 1-5.

The Authority may, with the approval of DPW, incorporate into the turnpike any existing state highway or bridge which it deems necessary as long as any costs incurred in connection therewith are reimbursed to the Commonwealth to the credit of the highway fund from the proceeds of the turnpike revenue bonds. § 1-6.

The Authority may construct grades, separations and make other changes to state highways, including vacating or relocating any public highway, which it deems necessary in connection with the construction of the turnpike. Any change in location of any portion of any public highway requires the approval of DPW. All costs in connection with the foregoing, and any damages created thereby, must be paid by the Authority as part of the cost of the turnpike. § 1-7.

All expenses incurred in carrying out the provisions of the Act are payable solely from funds provided for under the authority of the Act and no liability or obligation may be

incurred by the Authority beyond the extent to which monies have been provided under the Act. § 1-2.

II. Financing Options

A. Debt Issuance/Security

The Authority is authorized to issue turnpike revenue bonds for the purpose of paying all or any part of the cost of the turnpike. Principal and interest on such bonds is payable solely from revenues provided for in the Act. The maximum maturity date is forty years and the bonds may be made redeemable before maturity at the option of the Authority under the terms and conditions fixed by the Authority prior to the issuance of the bonds. The Authority may sell the bonds in such manner at either public or private sale and for such price or prices as it may determine to be in the best interest of the Authority. § 1-8.

The proceeds of the bonds may be used solely for the payment of the cost of the turnpike and may be disbursed in such manner and under such restrictions as the Authority may provide in the bond resolution or in the trust agreement securing the same. If the proceeds of the bonds initially issued are less than the cost of the turnpike, additional bonds may be issued to provide the amount of the deficit, and unless otherwise provided in the bond resolution or in the trust agreement, such additional bonds shall be deemed of the same issuance and shall be entitled to payment from the same fund without preference or priority over the bonds first issued. If the proceeds of the bonds exceed the costs of the turnpike, the surplus must be deposited to the credit of the sinking fund for such bonds. The Authority has the power to issue temporary bonds pending preparation of definitive bonds. Bonds may be issued without the consent of any other department, division, commission, board, bureau or agency of the Commonwealth and without any proceedings or the happening of any other conditions other than as provided in the Act. § 1-8.

The Authority is authorized to issue turnpike revenue refunding bonds for the purpose of refunding any bonds then outstanding which have been issued under the Act (including payment of any redemption premium thereon and any interest accrued or to accrue to the date of redemption of such bonds), or for the additional purpose of constructing any additional portions of the turnpike or improvements, extensions or enlargements thereof. The issuance of turnpike revenue bonds or turnpike revenue refunding bonds under the provisions of the

Act need not comply with the requirements of any other law applicable to the issuance of bonds. § 1-16.

Turnpike revenue bonds do not constitute a debt of the commonwealth or of any political subdivision thereof or a pledge of its faith and credit. § 1-2.

The bonds issued by the Authority are deemed eligible for investment by specified public institutions, financial institutions, trustees and other fiduciaries. § 1-14.

The Authority has discretion to secure the bonds by a trust agreement between the Authority and a corporate trustee. The trust agreement or bond resolution may pledge or assign the tolls and other revenues to be received, but may not convey or mortgage the turnpike or any part thereof. All expenses incurred in carrying out the provisions of the trust agreement or bond resolution may be treated as part of the costs of operation of the turnpike. § 1-9.

B. Revenues

The Authority has power to grant easements and to sell or lease any building or structure upon land owned by it whenever it deems such lands are not needed for its purposes, and the proceeds must be applied towards the cost of the turnpike or deposited to credit of the sinking fund for the turnpike revenue bonds issued under the provisions of the Act. § 1-7.

The Authority may lease air rights for non-turnpike purposes provided that any such lease for a period of forty years or more is subject to approval of the Governor. Any such lease may, with the consent of the Authority, be assigned, pledged or mortgaged and the lien of such pledge or mortgage may be foreclosed by appropriate action. Before the turnpike is transferred to the Commonwealth, the proceeds from any such lease (after payment of all expenses in connection therewith) must be applied toward the cost of operation of the turnpike or be deposited to the credit of the sinking fund for the appropriate turnpike revenue bonds issued under the provisions of the Act. After the turnpike is transferred to the Commonwealth, the proceeds from the air rights leases must be paid into the treasury of the Commonwealth for credit to the highway fund. The Authority may not lease any air rights unless it shall find that the lease is in no way detrimental to the maintenance, use and operation of Masspike, and, in the City of Boston, unless the authorities shall find after consultation with the Mayor that the construction and use of

such buildings will preserve and increase the amenities within the community. The air rights and buildings erected thereon and the proceeds from any lease may not be taxed or assessed to the Authority but shall be taxed to the lessee thereof. § 1-15A.

The Authority has power to lease for non-turnpike purposes land owned by the Authority and no longer required for the maintenance, repair or operation of Masspike provided that any such lease for a period of more than forty years is subject to approval of the Governor. Any such lease may, with the consent of the Authority, be assigned, pledged or mortgaged. Before the turnpike is transferred to the Commonwealth, the proceeds from such leases, after payment of all expenses in connection therewith, must be applied by the Authority in accordance with the appropriate trust agreement, and thereafter be paid into the Treasury of the Commonwealth for credit to the highway fund. Such leases are tax free to the Authority but taxable to the lessee. However, such taxes may not be enforced by a lien upon the property, except that the leasehold estate may be taken by the collector of taxes. § 1-15B.

The Authority is authorized to fix, revise, charge and collect tolls for the use of the turnpike and to contract with any person desiring to use any part thereof for placing equipment or services thereon and to fix the terms and conditions and rents for such charges for use. The tolls and rents must be fixed and adjusted to provide a fund sufficient with other revenues to pay (a) the cost of maintaining, repairing and operating the turnpike and (b) the principal and interest on the bonds as the same become due and payable and to create reserves for such purposes. The tolls and other rents are not subject to supervision or regulation by any department, division, commission, board, bureau or agency of the Commonwealth or any political subdivision thereof. The tolls and all other revenues from the turnpike, except amounts necessary to pay maintenance, repair and operation and to provide reserves therefor as may be provided in the bond resolution or in the trust agreement, must be set aside at such regular intervals in a sinking fund which is pledged to, and charged with the payment of, the principal and interest (and redemption, if any) on such bonds as the same become due. The use and disposition of monies inthe sinking fund are subject to the provisions of the bond resolution or the trust agreement. Except as provided in the bond resolution or trust agreement, the sinking fund is a fund for all such bonds without distinction or priority of one over another. § 1-10.

All monies received pursuant to the Act, whether as proceeds from the sale of bonds or as revenues, are deemed to be trust funds and must be applied solely as provided in the Act. § 1-11.

III. Miscellaneous Provisions Relating to Consolidation

The Authority is not required to pay any taxes or assessments upon the turnpike or any property acquired or used by the Authority under the provisions of the Act or upon the income therefrom, and the bonds issued under the provisions of the Act and their transfer and the income therefrom are free from taxation within the Commonwealth. § 1-13.

The Authority must maintain the turnpike in good repair. All damages caused to private property in connection with the powers granted under the Act must be paid out of funds provided under the Act. § 1-15. Until the turnpike becomes part of the state highway system under Section 17 of the Act (Transfer to Commonwealth), the Authority is liable for death, bodily injury or property damage by reason of a defect or want of repair of the turnpike and the turnpike is deemed to be a "way" within the meaning and purport of c. 89 of Mass. Gen. Laws and c. 90 of Mass. Gen. Laws. § 1-15. All general or special laws inconsistent with the Act are declared inapplicable to the provisions of the Act. § 1-5(m).

The Act provides for a deferred compensation plan for employees of the Authority and authorizes the Secretary/Treasurer to contract with any employee to make contributions in the name of such employee to an individual retirement account. § 1-15D, § 1-15E.

Upon the last to occur of the following:

a. all bonds issued under the Act and interest thereon have been paid or a sufficient amount for such payment to maturity has been set aside in trust for the benefit of bondholders;

b. the tunnels owned and operated by the Authority pursuant to Chapter 598 of the 1958 Act have become a part of the state highway system pursuant to Section 16 of Chapter 598; and

c. the Authority has contributed to the pension and expense funds of the Massachusetts Turnpike Authority employees' retirement system

> (established under §§ 1-28 of C. 32) amounts sufficient to fund benefits for persons then and thereafter entitled thereto, and to provide for the payment of all future expenses of administration of said system,

the turnpike, if in good condition and repair to the satisfaction of DPW, shall become a part of the state highway system and thereafter be maintained and operated by DPW free of tolls. Upon transfer of the turnpike to the Commonwealth, the Authority shall be dissolved, all remaining funds of the Authority shall be paid into the Treasury of the Commonwealth for the credit of the highway fund and all machinery, equipment and other property belonging to the Authority shall be vested in the Commonwealth and delivered to DPW. § 1-17.

Note: $500,000 was initially appropriated from the highway fund to provide for preliminary expenses of the Authority, which sum must be reimbursed by the Authority to the Commonwealth for the credit of the highway fund out of the proceeds of any bonds which may have been issued by the Authority under the provisions of the Act. § 1-18.

MASSACHUSETTS PORT AUTHORITY

I. Introduction

The Authority is a body politic and corporate within the Department of Public Works ("DPW") which is responsible for the operation and maintenance of the Mystic River Bridge, Logan Airport and Hanscon Field (the "airport properties"), the Port of Boston (the "port properties") and other facilities such as the trade and transportation center. The Authority is not subject to the supervision or regulation of DPW or of any department, commission, board, bureau or agency of the Commonwealth except to the extent provided in the Act. Mass. Gen. Laws, c-91 App. (the "Act"), § 1-2.

The word "authority" includes any board, body or commission succeeding to the principal functions of the Massachusetts Port Authority, if the Massachusetts Port Authority is abolished, or any board, body or commission to whom the powers given by the Act shall be given by law. § 1-1(b).

The Authority consists of seven members, all of whom are appointed by the Governor with the advice and consent of the council. The term of each member is seven years and any member

is eligible for reappointment. Any member of the Authority may be removed by the Governor, with the advice and consent of the Council, for misfeasance, malfeasance or willful neglect of duty but only after reasonable notice and a public hearing, unless notice and hearing are waived in writing. The Governor designates one of the members as Chairman. The Authority annually elects one of its members as Vice Chairman and also elects a Secretary/Treasurer who need not be a member of the Authority. § 1-2.

The Authority has power to:

a. adopt bylaws;

b. adopt official seal;

c. maintain offices;

d. sue and be sued in its own name;

e. construct or acquire additional facilities;

f. except as provided in c. 354 of the Acts of 1952, investigate the necessity for additional facilities for the development and improvement of commerce in the city and in the metropolitan area surrounding the city, including without limitation, additional traffic facilities, bus and truck terminals, off-street parking facilities, and facilities for the handling, storage, loading or unloading of freight or passengers at steamship, railroad, or motor terminals or airports, and to make such studies, surveys and estimates as may be necessary to determine the feasibility of any such facilities;

g. to extend, enlarge, improve, rehabilitate, lease as lessor or lessee, maintain, repair and operate the projects under its control (i.e. the airport properties, the port properties (i) or any additional facility, including the trade and transportation center, financed or acquired under the provisions of the Act together with all property rights, easements and interests pertaining thereto or acquired for the construction or operation thereof), and to establish rules and regulations for the use of any such project; provided that no such rules or

regulations may conflict with the rules and regulations of any state or federal regulatory body having jurisdiction of the operation of aircraft;

h. to issue tax-exempt revenue bonds, payable solely from revenues, and to borrow money in anticipation of the issuance of such revenue bonds;

i. to fix and revise, charge and collect tolls, rates, fees, rentals and other charges for the use of any project under its control; provided that in fixing or revising tolls for the Mystic River Bridge, the Authority must give at least ten days notice of the new schedule of tolls by publishing such revisions at least once in a daily newspaper of general circulation in the city;

j. to acquire, hold and dispose of real and personal property;

k. to acquire in its own name by purchase or otherwise, or by the exercise of eminent domain in accordance with the provisions of c. 79 of Mass. Gen. Laws, such public or private lands, property rights, rights-of-way, easements or other rights or ways as it may deem necessary for the construction or operation of any project; provided that before taking any private property, the Authority must give security to the Treasurer, in such amount and in such form as determined by DPW, for the payment of such damages as may be awarded in accordance with law for such taking;

l. to employ engineers, accountants and other agents;

m. to appear on its own behalf before any board, commission, department or other agency of the federal government or other states or international bodies in all matters relating to the Authority's power and purposes;

n. to receive federal grants for or in the aid of planning, construction or financing of any

project or any additional facility and to receive and accept contributions from any source, to be held, used and applied only for the purposes for which such grants and contributions may be made;

o. to make and enter into all contracts and agreements necessary or incidental to the performance of its duties;

p. to do all acts and things necessary or convenient to carry out the powers expressly granted in the Act;

q. to apply for, establish, operate and maintain or lease to others to operate and maintain, subject to the approval of the local municipality, a foreign trade zone and sub zones in the Commonwealth in accordance with the Foreign Trade Zones Act of 1934. (Note: Land acquired by the Authority after the effective date or the Act which was subject to taxation prior to the acquisition thereof and was used by the Authority for a foreign trade zone is not exempt from local real estate taxes and any such land leased by the Authority to others for such purpose is taxed to the lessees as if they were owners);

r. to make such studies, surveys and estimates as may be necessary in addition to or in connection with those made by other public or private agencies to determine the feasibility of acquiring necessary facilities and vessels to be operated by existing private marine carriers of passengers for hire, with or without such federal or other aid as may be available, and to take whatever action necessary to implement such passenger carrier service; and

s. to indemnify its members, officers and employees. § 1-3.

All expenses incurred in carrying out the Act are payable solely from funds provided under the Act and no liability or obligation may be incurred by the Authority beyond the extent to which monies have been provided under the Act. § 1-11.

The Authority is authorized to acquire from the Boston Redevelopment Authority any real property within the South Station Area and to acquire, construct, establish, own, lease, develop, maintain, operate, improve and rehabilitate as an additional facility a trade and transportation center to be located within the South Station Area. The Authority is authorized to operate and maintain the trade and transportation center either directly or indirectly through agents, lessees, concessionaires or others, but only in accordance with the following paragraph. § 1-4A.

The Authority is not permitted to operate or manage directly any hotel or motel accommodation, retail store, restaurant or off street parking facility forming a part of the trade and transportation center. The Act does not authorize the construction or leasing of any facility of a multi-commodity establishment of the type commonly known as a department store, and in no event may more than an aggregate of 15% of the total floor area of the trade and transportation center be used for retail and service activities not directly related to trade and transportation or custom functions. § 1-1(p).

The Authority may order the removal or relocation of any surface tracks, conduits, pipes, wires, pulls, etc. located in public ways or upon private lands which it deems to interfere with the laying out or construction or operation of any project, and the proper authorities must grant new locations for any such structure removed or relocated, and the owner must be reimbursed by the Authority for the reasonable costs of such removal or relocation. This power does not apply to facilities on the property of the Commonwealth under the control of DPW or the Metropolitan District Commission ("MDC") or installed under licenses or permits granted by said department or commission, except with the approval of DPW or MDC, as the case may be. The prior approval of the Governor and Council is required for the Authority to use lands owned by the Commonwealth, except as otherwise specifically provided in the Act. § 1-4.

The Act provides that title to the airport properties becomes vested in the Authority upon payment to the Treasurer and Receiver General of the Commonwealth (the "Treasurer") on the date of such transfer of:

a) a sum equal to the aggregate principal amount of all bonds of the Commonwealth issued under the provisions of:

        i. Chapter 383 of the 1945 Act;
        ii. Chapter 516 of the 1946 Act;
        iii. Chapter 676 of the 1947 Act;
        iv. Chapter 652 of the 1948 Act;
        v. Chapter 745 of the 1949 Act;
        vi. Chapter 760 of the 1950 Act;
        vii. Chapters 731, 733 of the 1951 Act;

    which bonds were outstanding on April 13, 1956; and

b) a sum equal to the aggregate cash payments under the provisions of:

        i. Chapter 756 of the 1951 Act;
        ii. Chapter 604 of the 1952 Act;
        iii. Chapter 660 of the 1953 Act;
        iv. Chapter 471 of the 1954 Act;
        v. Chapters 175, 738, and 769 of the 1955 Act;

    for the development of, or improvements to, the airport properties.

When such sums are paid to the Treasurer, the Authority becomes vested with the control, operation and maintenance of the airport properties and all rents, tolls, charges and revenues pertaining thereto. Upon such transfer, the Authority assumes all of the obligations and has the benefit of all of the rights of the Commonwealth in and to all leases, contracts and agreements relating to the airport properties and existing on the date of the transfer. At such time, the Treasurer must pay to the Authority a sum equal to the unexpended cash balances of the proceeds of the bonds referred to in a) above available on the date of the transfer, and the Treasurer must collect for the Commonwealth all accounts receivable as certified by the State Airport Management Board outstanding on the date of the transfer. Once title to the airport properties has vested in the Authority, the state airport management board is dissolved and certain other laws relating to airports (i.e. §§ 59A-59C of Chapter 6, and §§ 50A-50L of Chapter 90 of Mass. Gen. Laws) become inoperative. Thereafter no bonds may be issued under Chapters 484 and 712 of the Acts of 1957. §§ 1-5, 1-32.

The Act provides that, upon issuance of revenue bonds under the provisions of §8, and the application of proceeds of the bonds as provided in §§ 8(i) (redemption of Mystic River

Bridge Bonds) and 8(ii) (payments to Commonwealth on account of transfer of airport properties), title to the port properties vests in the Authority and possession of the port properties is transferred to the Authority; provided, however, that the Authority must pay to the Treasurer within the first ninety days of each fiscal year the net revenues (after payment of current expenses, funding of reserves for such purposes, and payment of costs of renewal and replacement of equipment) of the preceeding fiscal year, if any, of the port properties, after deducting therefrom an amount equal to the principal and interest requirements of such preceeding fiscal year for all bonds issued under the provisions of § 8(c) and § 9 for the purpose of constructing extensions, enlargements or improvements of said properties, together with a sum which represents the amount of the overhead costs of the Authority allocated to the port properties by the Authority. Such payments to the Treasurer must continue until the Treasurer has been paid:

(a) a sum equal to the aggregate cash payments by the Commonwealth, as of the date of transfer of the title to the port properties, under the provisions of:

i. Chapter 471 of the 1954 Act; and
ii. Chapter 738 of the 1958 Act

for improvements to the port properties; and

(b) a sum equal to the aggregate principal amount of all bonds of the Commonwealth issued under the provisions of:

i. Chapter 619 of the 1945 Act;
ii. Chapter 532 of the 1947 Act;
iii. Chapter 771 of the 1951 Act;
iv. Chapter 505 of the 1952 Act;
v. Chapter 649 of the 1953 Act; and
vi. Chapter 575 of the 1954 Act;

for the port properties outstanding upon the date of transfer and the interest paid thereon after said transfer, less the unexpended cash balances of the proceeds of such bonds available upon the day of transfer, which balances must be certified by the State Comptroller and transferred to the Logan Airport and Port of Boston Bond Redemption Account established by § 1-7 of the Act.

Once the port properties are transferred to the Authority, the control, operation and maintenance of the property, and all rents, tolls, charges, and revenues pertaining thereto vest in the Authority and the Authority assumes all of the obligations and has the benefit of all the rights of the Commonwealth in and to all leases, contracts, and agreements relating to the port properties existing on the date of the transfer. The Treasurer must collect for the Commonwealth all accounts receivable of the Port of Boston Commission outstanding on the date of transfer. When title to the port properties becomes vested in the Authority, the Port of Boston Commission is dissolved. After transfer of the port properties to the Authority, the Authority must make all necessary plans for the development of the Port of Boston and may initiate or participate in any rate proceedings or any hearings or investigations concerning the Port of Boston before any other body or official. Once the port properties are transferred to the Authority, all rights, powers and duties pertaining to the Port of Boston Commission are transferred to and exercised by the Authority; provided, however, that DPW, acting through the Division of Waterways, may excavate and dredge mooring basins and channels, construct shore protection, and issue licenses and permits for filling, dredging, etc. as long as such activities are not in conflict with the purposes, powers and plans for the development of the Port of Boston and provided that the Authority need not obtain any such license or permit. § 1-6.

The proceeds received by the Treasurer for the airport properties under § 1-5(a) (on account of bonds previously issued with respect to the airport properties) must be credited on the books of the Commonwealth to the Logan Airport and Port of Boston Bond Redemption Account. The proceeds must be invested in securities which mature not later than the several earliest maturities of the then outstanding bonds of the Commonwealth which have been issued for the airport properties and the port properties. The income from the investments, together with the payments received by the Commonwealth in accordance with § 1-4 (revenues from sales, leases of land or interests in lands), must be credited to the Logan Airport and Port of Boston Bond Redemption Account. After title to the airport and port properties has vested in the Authority, the principal and interest on the bonds shall be paid, without appropriation, from the Logan Airport and Port of Boston Redemption Bond Account. Upon retirement of the bonds, any balance then remaining in the Logan Airport and Port of Boston Redemption Bond Account must be transferred to the General Fund and the account abolished; payments received thereafter by the

Treasurer in accordance with §§ 4 (revenues from sales/leases of land or interest in lands) and 6 (on account of bonds issued and expenses paid in connection with the port properties) must be credited to the General Fund. § 1-7. Once title to the port properties has vested in the Authority, certain other laws regarding the Port of Boston Authority become inoperative (i.e. §§ 53-55 of Chapter 6, Chapter 91A and §§ 5, 6, and 8 of Chapter 619 of the 1945 Act and § 13-16 of Chapter 608 of the 1953 Act).

The proceeds received by the Commonwealth for the airport properties under § 1-5(b) (for expenses paid in connection with development of the airport properties), and the payments received on account of the port properties under § 1-6, must be credited on the books of the Commonwealth to the General Fund. § 1-7.

The Act provides that, upon the issuance of revenue bonds under § 8 and the application of the proceeds of such bonds as provided in § 8(i) (redemption of Mystic River Bridge Bonds) title to the Mystic River Bridge vests in the Authority and the bridge thereafter must be maintained, repaired and operated by the Authority. Upon such transfer, the trustee under the Mystic River Bridge trust agreement must deposit with the Port Authority trustee for the credit of the appropriate fund all monies then in its hands which pertain to the Mystic River Bridge. Once such funds are transferred, the Mystic River Bridge Authority is dissolved. § 1-13. Once title to the Mystic River Bridge has vested in the Authority, Chapter 562 of the 1946 Act, as amended by Chapter 627 of the 1947 Act and Chapter 432 of the 1954 Act, becomes inoperative. § 1-33, § 1-34.

Once control of the Mystic River Bridge, the airport properties or the port properties becomes vested in the Authority, the employees of said projects whose work is directly related to the projects shall be transferred to the Authority and shall continue to perform the same duties with comparable salary, insurance and benefits.

II. Financing Options

A. Debt Issuance/Security

The Authority has power to issue tax-exempt revenue bonds for the purpose of providing funds for:

a. refunding the Mystic River Bridge revenue bonds then outstanding;

b. making payments to the Treasurer as required by § 5 (on account of debt issued, and the costs of development of, the airport properties) , and making the payments required by Chapters 484 and 712 of the 1957 Act;

c. paying the cost of constructing such extensions, enlargements and improvements of the airport properties and port properties as authorized by the bond resolutions; and

d. providing funds for paying the current expenses of the Authority prior to the time when the revenues of the projects will be available for such purpose and for reimbursing the Commonwealth for sums paid to the Authority under § 26 (Initial Appropriation).

The proceeds of the bonds must be deposited in a trust account and applied as follows:

(i). such amount of the proceeds as may be required for the payment of principal and the redemption premium on the Mystic River Bridge revenue bonds then outstanding must be deposited with the Trustee under the Trust Agreement for the sole and exclusive purpose of paying such principal and redemption premium and the bonds must then be called for redemption at the earliest practicable date. The amount required for paying the interest which will accrue on such bonds from the last interest payment date to the date designated for redemption must be withdrawn from the Mystic River Bridge interest and sinking fund, a special fund created under the provisions of the Trust Agreement, and applied to the payment of such interest;

(ii). the Treasurer must be paid the sums required § 5 (on account of debt issued, and the costs of development of, the airport properties) of the Act and the payments required by Chapters 484 and 712 of the 1957 Act;

(iii). the Trustee must set aside from the proceeds the amount provided in the Trust Agreement for paying the current expenses of the Authority

prior to the time when the revenues of the projects will be available for that purpose; and

(iv). the balance of the proceeds must be deposited with the Trustee to the credit of a special fund or funds to be used solely for the payment of the cost of the extensions, enlargements and improvements of the airport and port properties which are authorized by the bond resolution, and such sums must be disbursed in such manner and under such restrictions as provided in the Trust Agreement. § 1-8.

The Authority is also authorized to issue tax-exempt revenue bonds, or borrow money in anticipation of the issuance of such revenue bonds, for the purpose of (i) acquiring or constructing any additional revenue producing facility which is authorized by the General Court under the Act; or (ii) acquiring or constructing any extensions, enlargements or improvements of any project then under the control of the Authority; or (iii) in the case of revenue bonds, to pay and discharge notes previously issued; or (iv) any combination of the foregoing; provided that no such additional facility, extension or enlargement may be constructed which will impair the revenues to be derived from facilities constructed pursuant to Chapter 354 of the 1952 Act. § 1-9.

The principal and interest on all bonds issued under the Act is payable solely from revenues as provided for in the Act. Bonds may be issued in one or more series and may mature at any time not exceeded forty years from their date. The bonds may be made redeemable before maturity at the option of the Authority upon the terms and conditions fixed by the Authority prior to the issuance of the bonds. If the proceeds of the bonds of any series initially issued are less than the amount required for the purpose of for which such bonds are authorized, additional bonds may be issued which shall be deemed to be of the same series and be entitled to payment from the same fund or funds as the bonds first issued without preference or priority over the bonds first issued. If the proceeds of the bonds exceed the amount required, the excess must be deposited to the credit of the sinking fund for such bonds or, if so provided in the Trust Agreement, may be applied to the payment of any other project. The Authority may also issue temporary bonds pending preparation of definitive bonds. The bonds may be issued by the Authority without the consent of any other department, division, commission, board, bureau or

agency of the Commonwealth or the City, and without any other proceedings or the happening of any other conditions or things other than as specifically required by the Act. § 1-10.

Money borrowed by the Authority in anticipation of the issuance of revenue bonds must be evidenced by notes or other obligations of the Authority. The aggregate principal amount of money so borrowed may not exceed 10% of the aggregate principal amount of revenue bonds of the Authority outstanding at the time such borrowing is made. The principal and interest on all notes and or other obligations of the Authority so issued must be payable no later than the fourth anniversary of the date of issue. Except as specifically provided in the Act, such obligations of the Authority may not be payable from revenues of the Authority but shall be payable solely:

1. from the proceeds of revenue bonds subsequently issued; or

2. from the proceeds of subsequent borrowings; or

3. if the notes or other obligations evidencing such borrowing so provide, from monies held for the credit of the maintenance reserve fund or the improvement and extension fund established by the Trust Agreement dated July 1, 1964 relating to the revenue bonds of the Authority, or any similar fund or funds established in any subsequent agreement, if such monies, to the extent permitted thereby, are pledged by the Authority to the payment of the principal and interest on such notes or other obligations and if such notes or other obligations were issued by the Authority for any purpose for which the monies held for the credit of such fund or funds may be disbursed; or

4. from revenues, but only to the extent of the claim or charge provided in the following sentence.

To the extent permitted by any Trust Agreement relating to revenue bonds of the Authority, and to the extent set forth in such notes or other obligations of the Authority authorizing the same, notes or obligations of the Authority may be secured by a claim or charge upon the revenues of the Authority which may be equal and proportionate with, but not superior to, that securing all bonds then outstanding or subsequently issued under such trust Agreement.

Such notes or other obligations may be issued by the Authority without the consent of any department, division, commission, board, bureau of agency of the Commonwealth or the City and without any other proceedings or the happening of any other conditions other than as specifically required by the Act. § 1-10A.

Revenue bonds or notes issued under the Act do not constitute a debt of the Commonwealth or a pledge of the faith and credit of the Commonwealth, but such bonds or notes shall be payable solely from revenues as provided in the Act or, in the case of notes, from the proceeds of bonds as provided in the Act. § 1-11.

The bonds issued under the Act may be secured by a trust agreement which pledges or assigns the tolls and other revenues of the projects on account of which the bonds secured by the Trust Agreement are issued, but such trust agreement may not convey or mortgage any project or any part thereof. The Authority must appoint a financial advisor (subject to approval by the Governor) who must certify prior to execution of any trust agreement that such trust agreement fully protects the public interest affected by its provisions. § 1-12.

The Authority also may issue tax-exempt revenue bonds for the purpose of providing funds for paying the costs of acquiring and constructing the trade and transportation center, and may apply the tolls, rates, fees, rentals and other charges from all projects under the control of the Authority to the payment of such cost of acquiring and constructing the trade and transportation center, subject to such conditions, limitations and restrictions as may be set forth in the Trust Agreement. § 1-4B.

The Authority also may issue revenue refunding bonds for the purpose of refunding any bonds then outstanding, including redemption premiums and interest accrued to the date of redemption, and, if deemed advisable by the Authority, for any one or more of the following purposes:

a. constructing improvements, extensions, or enlargements of any project or projects;

b. paying all or any part of the cost of any additional facility or facilities; or

c. in the case of revenue bonds, of paying and discharging notes issued in anticipation of issuance of such bonds; or

d. any combination of the foregoing. § 1-19.

The bonds of the Authority are deemed eligible for investment by government entities and fiduciaries etc. § 1-18.

B. Revenues

The Authority may sell the buildings or other structures upon lands taken by it and may sell, if a sale be practicable or if not, may lease, if a lease be practicable, any lands or rights or interest in lands or other property taken or purchased by it whenever the same shall, in the opinion of the Authority, cease to be needed for its purpose. The proceeds of any such sale or lease must be applied toward the cost of the project or deposited to the credit of the sinking fund for the revenue bonds issued under the provisions of the Act; provided, however, that no airport or port properties acquired from the Commonwealth under the Act may be sold without the prior approval of the Governor and Council; and provided further that the proceeds of any such sale must be paid to the Treasurer and credited as provided in § 1-7(a) (i.e. to the Logan Aiport and Port of Boston Bond Redemption Account).

The Authority is authorized to fix, revise, charge and collect tolls, rates, fees and rentals and other charges for the use of each project and to contract with any person, partnership, association or corporation desiring the use of any part of a project for any proper purpose, including a commutation rate of a uniform nature for the users of the bridge facility, as the Authority deems desirable. Such tolls, rates, fees and rentals must be fixed and adjusted so as to provide a fund sufficient with other revenues to:

a. pay the current expenses of the Authority;

b. pay the principal and interest on all bonds issued under the Act;

c. create reserves for such purposes;

d. make any payments required under § 1-6 (on account of the port properties);

e. provide funds for investigations, studies, etc. under § 3; and

f. provide funds for the cost of renewals or replacements, the cost of acquiring or

> installing equipment and the cost of enlarging, extending, reconstructing or improving any project.

Such tolls etc. shall not be subject to supervision or regulation by any department, division, commission, board, bureau or agency of the Commonwealth or any political subdivision thereof.

The Authority is authorized to pledge the amount of such tolls and other revenues, over and above amounts necessary to pay such current expenses and to fund such reserves as required in the Trust Agreement, to the payment of interest and principal of the bonds issued under the provisions of the Act. The monies so pledged must be set aside at regular intervals and in such amounts as provided in the Trust Agreement in a sinking fund for the payment of interest and principal and the redemption price or purchase price of such bonds. The balance of such tolls and other revenues not needed for such sinking fund requirements must be applied to the purposes set forth in Clauses d, e and f above as may be provided in the Trust Agreement. The use and disposition of the monies to the credit of the sinking fund is subject to the provisions of the Trust Agreement. Except as provided in the Trust Agreement, the sinking fund is a fund for all such bonds without distinction or priority of one over another. The word "bonds" as used in §§ 14, 16, 17, 18 and 25 includes all obligations of the Authority including notes of the Authority. § 1-14.

All monies received pursuant to the Act whether as bond proceeds or as revenues, are trust funds and must be applied solely as provided in the Act. § 1-15.

III. Miscellaneous Provisions Relating To Consolidation

The Authority is not required to pay any taxes or assessments upon any project or any property acquired or used or upon the income therefrom, and the bonds issued under the Act, their transfer and the income therefrom, including any profit made on the sale, are free from taxation within the Commonwealth. § 1-17.

No property of the Authority may be taxed to a lessee thereof under § 3(a) of Chapter 59 of the General Laws; provided that lands of the Authority (except certain lands within south Boston and lands acquired by the Authority which were subject to taxation prior to acquisition) shall, if leased for business purposes, be taxed as if the lessees were the

owners of the property, except that payment of the tax may not be enforced by any lien, but a sale of the leasehold interest may be made by the tax collector for the purpose of enforcing the payment of taxes by such lessees. § 1-17.

The Act provides that no revenue bonds may be issued pursuant to § 4(b) of the Act until the Authority has entered into an agreement with the Boston Redevelopment Authority providing for payments in lieu of taxes in connection with any real property acquired and owned by the Authority as part of the trade and transportation center. No such property may be taxed to a lessee thereof from the Authority regardless of the date of acquisition of the property by the Authority. The Authority is also directed to enter into agreements for payments in lieu of taxes with the cities of Chelsea and Boston and the Town of Winthrop provided that no such annual payments shall exceed in the aggregate for any fiscal year of the Authority: (i) the balance of revenues remaining for such fiscal year after payment of all current expenses of the Authority; (ii) any payments to the State Treasurer which may required under § 6; (on account of the port properties) and (iii) the deposits to the credit of any maintenance reserve or like fund and the interest and sinking fund provided for in the Trust Agreement referred to in § 12. § 1-17.

As long as any bonds issued under the Act are outstanding, no bridge, tunnel, or ferry for vehicular traffic may be constructed by the Commonwealth or any public instrumentality over, under or across the Mystic River between certain points in close proximity to the Mystic River Bridge and no franchise may be granted for the construction or operation of such a bridge, tunnel, or ferry. § 1-20.

Each employee of the Authority is a member of the Massachusetts Port Authority Employees Retirement System. If the General Court dissolves the Authority, the Act provides for the continuation of the Massachusetts Port Authority Employees' Retirement System. See § 1-25. The Act also provides for an employee deferred compensation program (§ 1-22A), and employee individual retirement accounts, (§ 1-22B).

It is the policy of the Authority to encourage collective bargaining and the Authority is authorized to bargain collectively with labor unions representing employees of the Authority. Sections 26-27(d) and 44(a)-44(e) of Chapter 149, §§ 26-29 and 44(a)-44(l) of Chapter 149 and §§39(f)-39(m) of Chapter 30 of the General Laws apply to the Authority. § 1-24.

Each project must be maintained and kept in good condition and repair and policed by the Authority. Until the projects of the Authority have come under the control of the General Court under the provisions of § 1-25, the Authority is liable for death, bodily injury or property damages to the same extent as if the projects were "ways" within the meaning of §§ 15, 18 and 19, Chapter 84 of the General Laws. § 1-23.

Once (i) all payments due on account of the port properties, as provided in § 6, have been made; (ii) all bonds issued under the Act and the interest thereon have been paid or a sufficient amount set aside in trust; and (iii) contributions have been made to the Massachusetts Port Authority Employees Retirement System in an amount sufficient to fund all benefits payable to current employees and persons receiving allowances under such system, all projects then under the control of the Authority shall be operated and maintained in such manner as may be provided by the General Court.

All other general or special laws inconsistent with the Act are inapplicable, except § 51M of Chapter 90 of the General Laws and Chapter 354 of the 1952 Act. § 1-29.

Note: $750,000 was appropriated from the General Fund of the Commonwealth for expenses of the Authority in carrying out the Act, which amount must be reimbursed to the Commonwealth out of proceeds any revenue bonds issued under § 8. § 1-26.

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SUMMARY OF
DEPARTMENT OF PUBLIC WORKS,
MASSACHUSETTS BAY TRANSIT AUTHORITY
AND
REGIONAL TRANSPORTATION AUTHORITIES
STATUTES

McDermott, Will & Emery
Boston

MEMORANDUM

TO: Roger Feldman
Tom Ingoldsby
Karen Dewis

DATE: February 25, 1992

FROM: Con Chapman

RE: MITA

I. Department of Public Works (M.G.L. c. 16).

a. The DPW consists of the Registry of Motor Vehicles, the Division of Marine and Recreational Vehicles, the Outdoor Advertising Board, and the divisions of administrative services, highway engineering, highway construction and highway maintenance. There is also a bureau of transportation planning and development, M.G.L. c. 16 §3A. There is within the statute provision for a department of solid waste disposal, but its functions and employees were transferred in 1987 to a newly-created Department of Environmental Protection. It appears that the Government Center Commission created by §1 of chapter 135 of the Acts of 1960 was also included in the DPW by its enabling statute, although the text of M.G.L. c. 16 was not amended to accommodate this change.

b. Of the above-mentioned agencies, bureaus and division, the Registry of Motor Vehicles, the division of motorboats, the division of waterways, the outdoor advertising division and the outdoor advertising board are not within the EOTC, M.G.L. c. 6A §19. I note that the division of motorboats and the division of waterways are not congruent with the Division of Marine and Recreational Vehicles referred to in the DPW statute; perhaps a division of recreational vehicles also exists in the DPW apart from these two divisions and that the three divisions are successors to the Division of Marine and Recreational Vehicles. If so, the division of recreational vehicles would (by exclusion under M.G.L. c. 6A §19) be part of EOTC.

c. The DPW currently has no independent debt issuance authority.

d. The DPW's revenues are accordingly obtained by appropriation.

e. There is no grant within the DPW statute to secure borrowings, as borrowings are not contemplated.

f. As there are no existing financing options, consolidation of agencies will not affect agency's financing ability.

g. Issues created by consolidation unrelated to financing:

i. Some DPW positions are covered by the civil service statute, G.L. c. 31 (or an equivalent status as veterans under G.L. c. 30 §9A). See M.G.L. c. 16 §4. Under the last reorganization of the DPW, namely, that which transferred the Department of Environmental Management to the Department of Environmental Protection in 1987, that employees entitled to civil service protection or equivalent veteran's statute were transferred to the new agency without loss of seniority or reduction in compensation. Chapter 584 of the Acts of 1987 established the framework for this transfer and includes a number of other provisions for the transfer of agency functions which would be useful in drafting the MITA statute.

ii. There appears to be no separate DPW pension plan. DPW employees would normally be covered by the Massachusetts State Teachers and Employees Retirement System.

h. Statutory provisions affecting privatization programs after agency consolidation: There appear to be no statutory provision in M.G.L. c. 16 affecting potential privatization programs.

II. Massachusetts Bay Transportation Authority (M.G.L. c. 161A).

a. Types of debt which can be issued.

i. Under M.G.L. c. 161A §4 the T can issue bonds to finance separate units of mass transit facilities for a term not to exceed 40 years.

ii. Section 12 of M.G.L. c. 161A provides that the state can borrow to finance payments owed to the T as the annual net cost of passenger service, cash shortfalls from operations and guaranties by the state of bond anticipation notes of the T.

iii. Section 12 provides that the T may temporarily borrow money and issue notes pending payment from the state and at any other time when in the opinion of the directors it doesn't have sufficient cash to meet its obligations in the ordinary course of business.

iv. Section 12A provides that the T may issue temporary notes for any of the above purposes; in exchange for notes of the T or the state issued under Section 12; or to reimburse the state for payments made under Section 12 or Section 13, under which the state is obligated to T bondholders.

v. Section 27 provides for the issuance by the T of interest bearing or discounted notes for the purposes and in the amounts that its bonds may be issued for. Such notes may not have a maturity of greater than 3 years.

b. Sources of funds: The T's sources of funds are as follows:

i. Revenues and receipts from operations: Tolls, fares, advertising sales, parking charges, sales of capital assets in the ordinary course of business, and gifts and grants for current purposes. See M.G.L. c. 161A §1.

ii. Assessments upon cities and towns: The difference between all income received from the sources identified in (i) and the current expenses of the authority is assessed upon cities and town according to varying percentages depending upon the type of transportation service provided and the classification of the community in question as one of "fourteen cities and towns," generally, Boston and cities and towns contiguous to it, or as one of "sixty-four cities and towns," generally, those lying beyond Boston and its immediately surrounding neighbors. M.G.L. c. 161A §§8, 8A and 9.

iii. Payments from the state: The state is liable in the first instance to pay the net cost of service of the T, that is, the excess of current costs over current revenues, M.G.L. c. 161A §§12, 13. It then assesses participating cities and towns according to the above-referenced formulas.

iv. Contract assistance: In addition to the net cost of service which may be assessed to cities and towns, the state may also contract with the T under M.G.L. c. 161A §28 and §28A to provide additional "contract assistance" for T operations which will not be assessed to cities and towns.

c. Collateral available to secure debt obligations: T bonds may be secured by revenues but not by a mortgage of property, M.G.L. c. 161A §24. Whether or not secured by revenues, the T's bonds are in effect payable only out revenues, either expressly (see M.G.L. c. 161A §4 as to bonds used to finance separate units of mass transit facilities) or by virtue of the fact that the T's properties are exempt from attachment and execution, M.G.L. c. 161A §2. The state is also liable on T obligations although secondarily, M.G.L. c. 161A §13.

d. Termination of existing financing options as a result of consolidation: The only existing financing option of the T that would presumably not be included in the financing powers of the consolidated agency would be the ability of the state to borrow to cover T operating shortfalls. Contract assistance would presumably cease to be a source of revenues if the point of the reorganization is to create an independent agency with sufficient borrowing capacity to eliminate the need for state funding, however.

e. Statutory prohibitions on refinancing existing obligations: As noted in previous memos, M.G.L. c. 161A §23 prohibits the reissuance of T bonds redeemed after January 1, 1992. There is a general constitutional limitation of reissuance of debt on which the state is a principal, namely the requirement under §3 of the 62nd amendment to the state constitution requiring a two-thirds vote of both houses. The state Supreme Judicial Court has held that this does not apply to T bonds even though T bondholders have a direct remedy against the state under M.G.L. c. 161A §13 if T bonds go into default, Massachusetts Bay Transportation Authority v. Boston Safe Deposit & Trust Co., 348 Mass. 538 (1965).

f. Non-financing issues created by agency consolidation:

i. The T statute has its own labor relations provisions permitting collective bargaining and

providing for binding arbitration. M.G.L. c. 161A §19 *et seq.* T employees do not have the right to strike, M.G.L. c. 161A §19A, and the presence of this express provision presumably reflects some doubt as to whether the creation of a separate statutory authority would impair the prohibition against striking that would otherwise apply to state employees.

ii. The T has its own deferred compensation program, program for contributions to individual retirement accounts and health benefit plan. M.G.L. c. 161A §§19H, 19I and 19J. This is consistent with the notion that T employees are employees of a separate authority and not of the state, and thus not covered by state pension and health plans.

g. Statutory provisions affecting privatization programs after agency consolidation: The existing T statute contemplates agreements with private companies either by lease of T facilities, M.G.L. 161A §4, or by contract with private companies to private transportation services, M.G.L. 161A §5(j) (as to areas outside the T's member cities and towns) and (k) (as to areas within the T's member cities and towns). The tort liability of the T is defined in M.G.L. 161A §21; there is no provision for limitation on liability by private operators.

III. Regional Transit Authorities (M.G.L. c. 161B).

a. Type of debt which may be issued: The debt issuance authority of the RTA's roughly parallels that of the T. It may issue bonds with a maximum maturity of 40 years to pay capital costs and to acquire and improve mass transit facilities, M.G.L. 161B §§6(o), 17. RTA's may also issue interest bearing or discounted notes for the purposes and in amounts corresponding to the applicable limits on their bond issuance powers, M.G.L. 161B §21.

b. Sources of funds for payment of debts:

i. Revenues and receipts from operations: Tolls, fares, advertising sales, parking charges, sales of capital assets in the ordinary course of business, and gifts and grants for current purposes. *See* M.G.L. c. 161B §1.

ii. Assessments upon cities and towns: The difference between all income received from the sources identified

in (i) and the current expenses of the authority is assessed upon cities and town included in the authority according on a pro rata basis reflecting losses in each community as a percentage of the authority's total losses. M.G.L. 161B §9.

iii. Payments from the state: The state is liable in the first instance to pay the net cost of service of the authorities, M.G.L. c. 161B §10. It then assesses participating cities and towns according to the above-referenced formula.

iv. Contract assistance: In addition to the net cost of service which may be assessed to cities and towns, the state may also contract with the RTA's under M.G.L. c. 161B §23 to provide additional contract assistance for RTA operations which will not be assessed to member cities and towns.

c. Collateral available to secure debt obligations: RTA bonds may be secured by revenues but not by a mortgage of property, M.G.L. c. 161B §18. RTA bonds to finance separate units of mass transit through unit lease arrangements may be secured only by lease payments or revenues in the event the RTA cancels the lease, M.G.L. c. 161B §7. Other RTA property is not subject to attachment or execution, M.G.L. c. 161B §2. The state is secondarily liable on RTA obligations, M.G.L. c. 161B §11.

d. Termination of existing financing options as a result of consolidation: There appear to be no existing financing options of RTA's that could not be included in the financing powers of the consolidated agency; it is not clear that contract assistance would continue to be a source of revenue for the reason pointed out above with regard to the T, however.

e. Statutory prohibitions on refinancing existing obligations after consolidation: There appear to be none.

f. Non-financing issues created by consolidation: The RTA statute does not have the same type of employee benefit infrastructure that the T statute has. Each RTA has the power to hire employees and to enter into collective bargaining agreements, M.G.L. c. 161B §6(d). The statute is silent as to the right of RTA employees to strike and as to whether they are eligible for

participation in municipal pension plans, etc. RTA's are political subdivisions of the state, and RTA employees may arguable be covered by the state employees' pension and health plans.

g. Statutory provisions affecting privatization programs after agency consolidation: RTA's currently have the power to contract with private parties for construction, operation and use of mass transit facilities and equipment. Agreements with private companies for provision of mass transit service may not extend beyond a year and may not permit private companies to obtain more than a "reasonable return," M.G.L. c. 161B §6(f).

Transportation Issues Survey Responses

- Follow up Interview Summaries
- Survey Responses:
    - California
    - Chicago Transit
    - Chicago RTA
    - Maryland
    - Minnesota
    - New York State
    - New Hampshire
    - Pennsylvania
    - Port Authority NY/NJ
    - Texas
    - Toronto
    - Washington State

FOLLOW UP TELEPHONE INTERVIEWS: EOTC SURVEYS

NEW YORK DEPARTMENT OF TRANSPORTATIN

New or unique funding sources

Until recent State legislation passed, there was no dedicated funding for highways and transit. The NYDOT had to rely on the State Legislature each year to appropriate transportation money from the general fund. Even the 8-cents-a-gallon state gasoline tax was placed in the general fund and used for a variety of purposes. A State financial crisis prompted the enactment of new transportation financing legislation. The new law increases the following taxes which are all dedicated to highway capital spending except the petroleum business tax which is for highways and mass transit and derives the most revenues:

- 15% increase in motor vehicle registration fee
- double the ton mile (weight/distance) truck tax
- dedicates 4 cents out of the 8 cents a gallon gasoline tax
- increases the petroleum business tax levied on petro companies licensed in New York.

These dedicated revenue sources are expected to increase funding by more than $1 billion annually. There was virtually no political opposition to the legislation because the State was in a financial crisis and the funds were dedicated to transportation capital--not operating--needs.

Intermodal improvements

State legislation was approved last year to reduce highway maintenance residences, which are virtually countywide transportation administration offices. There was no political opposition to staff reductions because it saved money and consolidated offices incrementally (ie, two offices eliminated the first year; three the second year).

NY DOT is responsible for highways and canals and almost all toll roads are separate functions. The State owns two smaller airports: one on Long Island and the other is Stewart Airport. LaGuardia and JFK are owned and operated by the PANYNJ.

TEXAS DEPARTMENT OF TRANSPORTATION

Coordinating functions/operations

The Texas State Legislature last year passed House Bill 9 which created a new Texas Department of Transportation replacing the existing state highway department. The bill merged the once autonomous Department of Aviation under the new DOT. In September 1992 the Motor Vehicle Commission also will be part of TDOT. By 1997 the Texas Turnpike Authority also may be combined with TDOT if certain conditions are met. The bill required the State to develop a statewide transportation plan to encompass all modes of transportation.

House Bill 9 implements some of the recommendations made by the State in its effort to audit all state agencies for budget reductions. It was enacted after the Texas State Comptroller, John Sharp, published his Texas state performance review report, "Breaking the Mold", in July, 1991. The Comptroller recommended that the existing 24 Texas district highway offices be reduced to twelve. HB 9, however, stipulated that there would be no more than 18 highway districts offices. Everyone supported the measure except the smaller communities that did not want to lose their economic base by closing these offices. As a result, the Legislature passed a resolution that asked the Texas DOT to put reorganization plans on hold until public hearings were completed.

TDOT established a district engineer task force that evaluated which district offices to close. It considered criteria such as vehicle miles, lane miles, quality of life, and real estate options.

While the resolution did not change the law, the State still has 24 district offices and will add another one this year. The resolution stipulated that TDOT cannot reduce the district offices until after June, 1993--when the Legislature goes out of session.

Organizational Structure

TDOT is controlled by a three-member board called the Texas Transportation Commission (TTC), which has a chair. All three members are appointed by the Governor. The Aviation Department which is now combined with TDOT has a six-member advisory commission appointed by TTC and reports to TTC rather than directly to the Governor

All State legislation related to the Department of Aviation was recinded after the merger. The primary reason for the merger was to save general funds. The Department of Aviation was funded at $20.5 million annually out of general revenues as a separate agency. Under the merger, no general funds are used for aviation, only dedicated gas tax money.

The Department of Aviation was against the merger as was the Turnpike Authority, but the Authority was able to put political pressure on the Legislature to delay the merger. The State Legislature was reluctant to give the Governor more power by adding the Turnpike Authority to TDOT. Texas Governor Ann Richards was trying to establish a cabinet-style government with a secretary of transportation. Although the Turnpike Authority currently remains a separate agency, all three Texas Transportation Commissioners sit on the its Board.

The Turnpike will be part of TDOT in 1997 if:

- TDOT loans money to the Turnpike Authority for start-up projects
- The three planned feasibility reports recommend merging these agencies. These reports are due in 1993, 1995, and 1997.

The Turnpike Authority is allowed to bond for toll facilities, unlike TDOT which has a pay-as-you-go highway system. One reason TDOT supports the merger is that it hopes the Legislature eventually might allow debt financing for highways too. Current highway resources are inadequate--they can only meet 48 percent of the work authorized by the TTC.

Intermodal Perspective

Recent Texas state law requires a statewide transportation plan to encompass all modes of transportation, a requirement similar to the federal Intermodal Surface Transportation Efficiency Act of 1991. To implement the new law, TDOT is holding extensive hearings with the private sector, MPOs, rail operators, and other relevant organizations. It has formed both internal and external teams to investigate the best way to develop a statewide planning process.

MINNESOTA DEPARTMENT OF TRANSPORTATION

Criteria for Issuing Debt

Prior to 1982, bonding for the Minnesota Trunk Highway construction was limited by a $150 million debt ceiling and a 5 percent interest payment. These limitations were removed in November, 1982 and MnDOT then developed its own debt limitation guidelines.

MnDOT is required to do an analysis of expenditures and revenues for the Trunk Highway Fund for ten fiscal years following the year in which the bond sale takes place to determine the current and projected debt service. This analysis includes total revenues, expenditures, and capital funds which is defined as the difference between revenues and current operating expenses.

Bonds may be sold if the total debt service projected for existing outstanding bonds plus the bond sale under consideration will not exceed 25 percent of available capital funds in any one of the next six fiscal years.

Privatization Techniques

Because MnDOT is prohibited from accepting private sector donations, these donations must be funnelled through the local governments. If the local governments have interest in the project, they usually get the private sector to donate the rights-of-way and pay for up-front feasibility analyses such as environmental impact studies.

Intermodal Perspective

MnDOT is in turmoil trying to develop an intermodal planning approach as required under federal law. It expects that this process will continue to be refined as more money is spent on airports and transit and less on building new highways.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

Organizational Structure

NJDOT has highways under its jurisdiction and both the Turnpike Authority and NJ Transit are independent agencies although they have interrelationships and commingling of funds. NJDOT Commissioner is chair of NJ Transit and thus approves its capital program. A portion of NJ Transit capital funds is derived from the Transportation Trust Fund. Twenty-five percent of surplus toll revenues collected annually by the Turnpike Authority is placed in the Fund.

Funding and Financing

Approximately $331 million is collected into the Transportation Trust Fund annually. It is comprised of seven of the ten-cents-a-gallon gasoline tax, truck tax, motor vehicle registration fees and 25 percent surplus toll revenues. Trust funds can be used only for capital. Any operating assistance is derived from general revenues. The Fund is primarily used to support highways, rail freight and ridesharing as well as transit. It can support up to 10 years of bonds. There continues to be more emphasis on funding non-highway investments.

Intermodal Perspective

NJDOT has established Transportation Management Associations (TMAs) which looks at multi-modal transportation needs and places greater emphasis on meeting requirements under the Clean Air Act. For this reason, TMAs plan ridesharing and vanpooling projects which are funded by the Trust Fund.

A special transportation board has been created that prepares unified, multi-modal capital programming of projects for the entire state as well as a joint business plan. The Board has been in existence for one year and is chaired by NJDOT Commissioner. It also is responsible for monitoring and reporting on the activities of NJ Transit and the Turnpike Authority.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION

Transportation Issues Survey

II. Background Information

1. Date	March 13, 1992
Name	Rick Terry
Position	Chief, Office of Highways Capital & Support Financi
State/Organization	California Department of Transportation
Phone Number	(916) 654-2350

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	*Position*	*Phone Number*

III. Funding/Financing Techniques

3. With respect to highway funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

ALL TRANSPORTATION-RELATED(1992-93)
(Caltrans, Motor Vehicles, Highway Patrol, etc.)

Local Sales Tax	$2,815	22.2%
Fuel Tax	$2,488	19.6%
Vehicle License Fees	$2,354	18.6%
Federal Trust Fund	$1,768	13.9%
Passenger Rail Bonds	$1,005	7.9%
Vehicle Registration, Drivers Licenses, etc.	$ 989	7.8%
Vehicle Weight Fees	$ 541	4.3%
Toll Bridge Revenues	$ 163	1.3%
Transportation Planning & Development Sales Tax	$ 146	1.1%
Other	$ 442	3.3%
TOTAL	$12,691	

(Dollars in millions)

CALTRANS FUNDING(1992-93)

State Highway Account	$ 485	27.4%
Federal Trust Fund	$1,126	63.7%
Passenger Rail Bond Account	$ 71	4.0%
Toll Bridge Funds	$ 69	3.9%
Other	$ 17	1.0%
TOTAL	$1,768	

CALTRANS EXPENDITURES (1991-92)

State Operations*.	$1,764	37.99%
Local Assistance	485	10.44%
Capital Outlay	2,395	51.57%
TOTAL	$4,644	

* Operations includes $709,956,000 for maintenance (15.29%.)

Source: 1992-93 Governor's Budget

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION

Transportation Issues Survey

4. How adequate are these sources?

The resources are sufficient to deliver the planned program. In 1990, the voters of California passed State Constitutional Amendment 1, which increased Transportation Programs. Attached is the Executive Summary from the 1990 State Transportation Improvement Plan (STIP) Fund Estimate, which shows that the level of transprtation funding in the State increasing. It also shows the impact on these programs had the voters not passed SCA1.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

The attached STIP Fund Estimate shows that funding would not be sufficient to deliver the program without passage of SCA1. There was a shortfall in the 1988 STIP, which is being funded with increased funding of SCA1.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

In the 1990's there are expanded opportunities for the private sector to become involved in design, construction and operation of transportation facilities. Legislation enacted in 1989 authorized Caltrans to solicit and enter into agreements for a demonstration program in which the private sector would construct and lease back from the Department four transportation projects. Private developers, under Caltrans oversight, are in the process of obtaining environmental clearance for proposed projects.

Legislation was enacted which, under certain conditions, allows us to borrow against future appropriations.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

- We are building rail and transit facilities using General Obligation Bonds. The bonds (approved in general elections by a two-thirds majority of the voters) are repaid with sales tax revenue
- We are building office facilities using lease-revenue bonds and "College Saver" Bonds. The bonds (approved by a two-thirds vote of both houses of the Legislature) are paid back from the State Highway Account as annual lease payments to meet debt service on the bonds.

8. What criteria do you use in deciding when and how much debt to issue?

The electorate provides the authority to issue General Obligation Bonds. The Department works with the Treasurer's Office to issue bonds. Departmental policy on issuance is based on our annual debt service limits.

Lease revenue bonds on facilities is determined on a case-by-case basis. Proposals to fund facilities must be economically sound. Debt service on borrowed money to fund an office building, for example, must be comparable to lease costs and must reach a break-even point early in the life of the proposed facility.

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

In addition to private sector development (see No. 6, above) the State is experiencing local participation in funding of State Highway Improvements. Through 1991, 18 counties comprising over 80% of the state's population, have enacted local sales tax measures to fund transportation improvements. Over their lifetimes, these measures will generate nearly $25 billion in transportation revenues. About $8 billion of these revenues have been dedicated to State Highway System improvements.

Caltrans provides oversight of those projects being built on the state system by local and private entities using other than local sales and use tax revenues. At present, more than 400 of these projects with local investment of nearly $2.5 billion have been started or proposed.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

- For privatization, see Question Number 6, above.
- The Department has contracted with the private sector to provide us with a turn-key district office in Oakland. The project was financed with bonds. The private developer will complete the building in the fall of 1992.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

IV. Coordinating Functions/Operations

11. To what degree have you approached transportation policy from an "intermodal" perspective? Please explain.

In July 1973, the Department of Transportation was created as a multimodal transportation department. The department administers transportation in California, from aeronautics to transporation planning. Over the years we have built multimodal facilties for linking various transportation forms. For example, the Transbay Terminal in San Francisco is an intermodal terminal for bus, rail, and inter-city rail transit.

12. Do you "cross fund" projects with revenues generated from tolls, fees, taxes, etc.? Please identify instances and explain rationale.

If by "cross-fund" you mean funding projects with a mix of Federal, State and local funds, regardless of source, we do. We have funded projects at the State level using a combination of State Highway Account and other state funds (e.g. - toll bridge funds) and with locals (e.g. - local general funds, Federal Aid Urban or tax measure revenues.)

Some projects are based on a specified match of local revenues as well as State/Federal revenues. This approach is used based upon project type, availability of local funds, and the need to maximize use of State and Federal funds.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

The Department has twelve transportation districts statewide. Each district has administrative, engineering and project delivery responsibility for its portion of programs. There is centralized authority at Headquarters in Sacramento to work with the Governor and the Legislature to set policy and funding levels on a statewide basis.

The following are examples of functions that are centralized in Sacramento:

- Development of Fund Estimate
- Budget Development and monitoring.
- Advertising and letting of major construction contract (over $300,000.)
- Development of the State Transportation Improvement Plan and other program documents.
- Headquarters design review.
- Legislative liaison.
- Equipment fabricarion.
- Warehousing and major purchasing.

1990 STIP FUND ESTIMATE
EXECUTIVE SUMMARY

This document presents the Department's 1990 STIP Fund Estimate. It was produced in accordance with existing statutes and the California Transportation Commission's adopted Fund Estimate Methodology. The Fund Estimate is based on the assumption that SCA 1(Garamendi) is ratified by the voters in June 1990. This assumption, required by the Methodology, is key to this Fund Estimate.

Funds Available For Transportation Projects

This Fund Estimate shows there are a combined ***$15.0*** billion available to fund transportation projects during the seven-year STIP period.

AVAILABLE FOR CAPITAL OUTLAY
SEVEN-YEAR STIP TOTALS
(\$MILLION)

	SCA 1 PASSES
STATE HIGHWAY ACCOUNT	***$10,650***
PASSENGER RAIL BOND FUND	3,000
TRANSPORTATION PLANNING & DEVELOPMENT ACCOUNT	628
TOLL BRIDGES:	
• NORTHERN BRIDGE GROUP	***288***
• SOUTHERN BRIDGE GROUP	***367***
• VINCENT THOMAS BRIDGE	***4***
• SAN DIEGO/CORONADO BRIDGE	56
AERONAUTICS ACCOUNT	49

* Estimates based on no change in current program priorities

Passage Of SCA 1

Assuming the voters approve SCA 1 in June:

- There will be substantial funds available for adding new transportation projects;
- All counties will be able to receive their traditional share of transportation projects;
- All of the statutory funding levels established as part of the Summit package can be met; and
- Statutory expenditure requirements, including the requirement that North counties receive 40 percent of funds, will be met.

Should the voters defeat SCA 1:

- There will be no funds available for adding new transportation projects;
- It will not be possible to meet the statutory North/South and County Minimum expenditure requirements;
- The 1988 STIP will not be fully funded until some time after the end of the seven-year STIP period; and
- The statutory funding levels established as part of the Summit package will not be met.

Note: Data formatted as ***italic*** have been revised.

1990 STIP FUND ESTIMATE

Introduction

The purpose of the Fund Estimate is to provide a seven-year estimate in annual elements of all federal and state funds reasonably expected to be available in each county for programming in the State Transportation Improvement Program (STIP).

To accomplish this, the Fund Estimate takes a "snapshot" of the financial condition of the various transportation funds. This snapshot then becomes the basis for making changes to the long-term funding commitments through the balance of the STIP process.

In accordance with the adopted Fund Estimate Methodology, this Fund Estimate has been designed to be a concise policy document. The prime focus is on the information the California Transportation Commission (CTC) will need to determine the range and type of project nominations it will accept for the STIP, and the choices it can make among these projects to satisfy the statutes. It is intended that the Fund Estimate be a member of a family of documents which, when viewed as a whole, provide both the policy maker and technical analyst all relevant information regarding the current financial status of the State Transportation Improvement Program.

Why This Fund Estimate Is Different Than In The Past

Transportation Summit

The 1988 STIP was based, in part, on voter approval of a combined $1.7 billion bond issue authorized by SB 140 (Deddeh) (Ch. 24, Statutes 1988). When the bond issue failed in June 1988, the adopted 1988 STIP became seriously underfunded. To resolve the resulting transportation funding crisis, Governor Deukmejian invited legislative leaders, representatives of State and local government, as well as business, labor and highway users, to participate in a series of three transportation summit meetings.

The culmination of the summit process was the signing of a five bill package by the Governor on July 10, 1989. The five bills, SB 300 (Kopp), AB 471 (Katz), AB 680 (Baker), AB 973 (Costa), and AB 2218 (Ferguson) became, respectively, Chapters 105 - 109 of the Statutes of 1989. Taken together, these five bills represent a fundamental change in the way transportation projects are programmed and financed in California.

Specifically:

- SB 300 and AB 471 reformed the STIP process, raised $15.5 billion for transportation through increased fuel taxes and weight fees, established ten-year funding targets, and put in place some cost control measures to insure that the additional funds are invested as intended.
- AB 973 provided for a series of three, $1 billion general obligation bond issues for intercity, commuter and urban rail projects, bringing total new funding to $18.5 billion.
- AB 680 authorized four "privatization" demonstration projects; and
- AB 2218 established a "fast-track" project approval process for specific types of projects.

As a result of the new statutes, this Fund Estimate reflects:

- The new seven-year STIP period, as well as the ten-year time period required by the Methodology;
- New revenues generated by voter approval of SCA 1;
- New transportation programs; and
- The new allocation requirements.

Loma Prieta Earthquake

On October 17, 1989 a devastating earthquake struck the San Francisco Bay Area causing widespread damage to public and private property. Some of the most dramatic damage from the earthquake was the collapse of a section of the Nimitz Freeway (I-880) and the dislocation of a section of the San Francisco-Oakland Bay Bridge. In response, the Governor called a special session of the Legislature to provide emergency funding for earthquake relief efforts. Among the provisions passed in the special session was a 1/4 percent sales tax increase, the proceeds of which are to be used for earthquake relief. It is anticipated that approximately $400 million of these funds will be made available to meet Federal matching requirements for State and local projects. A separate Fund Estimate display is included for these funds.

In addition, $1 billion in Federal Emergency Relief funds were made available for transportation projects. These funds are also included in the separate display.

Major Issues

Transportation Summit

Overview

This Fund Estimate is significantly different from previous Fund Estimates in a number of key ways. The new statutes provided for increased fuel taxes, weight fees and transit bonds, and established ten-year funding targets for those new revenues. Of the $18.5 billion new revenues generated over the ten-year funding plan, $12.9 billion will be received during the seven-year STIP period, distributed as follows:

$7.7 B	State Highway Account,
$3.0 B	Passenger Rail Bonds,
$1.9 B	Subvention to Cities and Counties, and
$0.3 B	Transportation Planning And Development (TP&D) Account.

The new statutes also changed the makeup of the highway program. Previously, all major highway projects funded through the State Highway Account were included in the STIP. Now, the STIP is limited to intercity, commuter and urban rail capital improvements, flexible congestion relief, interregional road system, and retrofit soundwall projects. Projects which help protect, operate or manage the existing highway system, as well as both the new State-Local Transportation Partnership and Environmental Enhancement And Mitigation programs are now outside of the STIP.

Another change made by the Summit Bills affects the County Minimum requirements. Previously, upon the start of each five-year county minimum period, each county's minimum expenditure level was calculated without regard to whether or not that county received its full minimum allocation in the previous five-year period. Now, to the extent that county minimums are not met in the

five-year period, any individual county shortfall will be carried forward and added to the following five-year period. Under the earlier rules, there was no consequence if the CTC adopted a STIP that was not in strict compliance with the North/South and County Minimum requirements. Now, upon adoption of the 1992 STIP, the commission shall not allocate funds for any project unless the adopted STIP is programmed to comply with the North/South and County Minimum requirements.

The final significant modification made by the Summit Bills, from a Fund Estimate perspective, was changing the timing and duration of the STIP. Previously, the STIP was a five-year program, updated annually. Now, the STIP is a seven-year program, updated biennially.

SCA 1 FUNDING
NORTH – SOUTH DISTRIBUTION
($MILLIONS)

	NORTH	SHARE	SOUTH	SHARE	TOTAL
TOTAL FUNDING					$18,500
NOT SUBJECT TO N/S*					- 6,950
SUBJECT TO N/S					$11,550
• NEW CONSTRUCTION:					
–Interregional Roads	$690	55%	$560	45%	1,250
–Projects in 1988 STIP	1,063	46%	1,247	54%	2,310
–Rail & FCR	1,481	27%	4,069	73%	5,550
Sub Total	$3,234	35%	$5,876	65%	$9,110
• MAINT. & REHAB. (HSOPP):					
–Projects in 1988 STIP	$705	59%	$485	41%	$1,190
–New HSOPP Projects	600	60%	400	40%	1,000
Sub Total	$1,305	60%	$885	40%	$2,190
• SOUNDWALLS	$41	27%	$109	73%	$150
• ENVIRONMENTAL ENHANCEMENTS	$40	40%	$60	60%	$100
TOTAL SUBJECT TO N/S	$4,620	40%	$6,930	60%	$11,550

* Preliminary projections for the State/Local Partnership, Traffic Systems Management, and Intercity Rail figures indicate that North counties will receive somewhat more than 40% of the figures. Therefore, total expenditures of new program dollars will exceed 40% in the North counties.

Note: In addition, revenues from existing sources may be programmed in the 10-year period. They are assumed to split 40%N - 60%S in this analysis; any variation is expected to be negligible.

SCA 1

Many provisions of the summit bills are contingent upon voter approval of SCA 1 (Garamendi) in June 1990. This constitutional amendment will appear on the ballot as "The Traffic Congestion Relief and Spending Limitation Act of 1990"; and the ballot description will read:

> This measure would enact a statewide traffic congestion relief program and update the spending limit on state and local government to better reflect the needs of a growing California population. It would provide new revenues to be used to reduce traffic congestion by building state highways, local streets and roads, and public mass transit facilities. This measure would enact a 55 percent increase in truck weight fees and a five cent per gallon increase in the fuel tax on August 1, 1990, and an additional one cent on January 1 of each of the next four years. This measure updates the state appropriations limit to allow for new funding for congestion relief, mass transit, health care, services for the elderly, and other priority state programs, while still providing an overall limit on state and local spending. This measure would continue to provide that public education and community colleges receive at least 40 percent of the state general fund budget, and would provide that revenues in excess of the state appropriations limit are allocated equally between education and taxpayers.

The provisions of the Summit Bills contingent upon voter approval of SCA 1 are:
- Fuel tax and weight fee increases,
- Disbursement of additional fuel tax revenues to cities and counties,
- Three $1 billion bond issues,
- Congestion management program, and
- "Fast Track" program.

Total Funds (Old And New) Distributed By SCA 1 Programs As Reflected In The 1990 Fund Estimate ($ Millions)

	7-Year STIP Period
Total Resources:	***$29,224***
Less:	
• Local Subventions	$1,915
• Noncapital Expenditures	10,004
Funds Available For Transportation	***$17,305***
Non-STIP Capital Outlay:	
• State/Local Partnership	$1,500
• Traffic Systems Management*	497
• HSOPP*	2,963
• Environmental Enhancement And Mitigation	60
• Transit Capital	297
• Non-STIP Capital Outlay Support	1,505
Funds Available For STIP Programs	***$10,483***
STIP Capital Outlay:	
• 1988 STIP Guideways	$267
• Intercity, Commuter, Urban Rail Projects	3,000
• Flexible Congestion Relief*	***4,122***
• Interregional Road System*	1,115
• Retrofit Soundwalls*	133
• STIP Capital Outlay Support	1,857

* Includes 1988 STIP projects

Note: Data formatted as *italic* have been revised.

Transportation Program With SCA 1

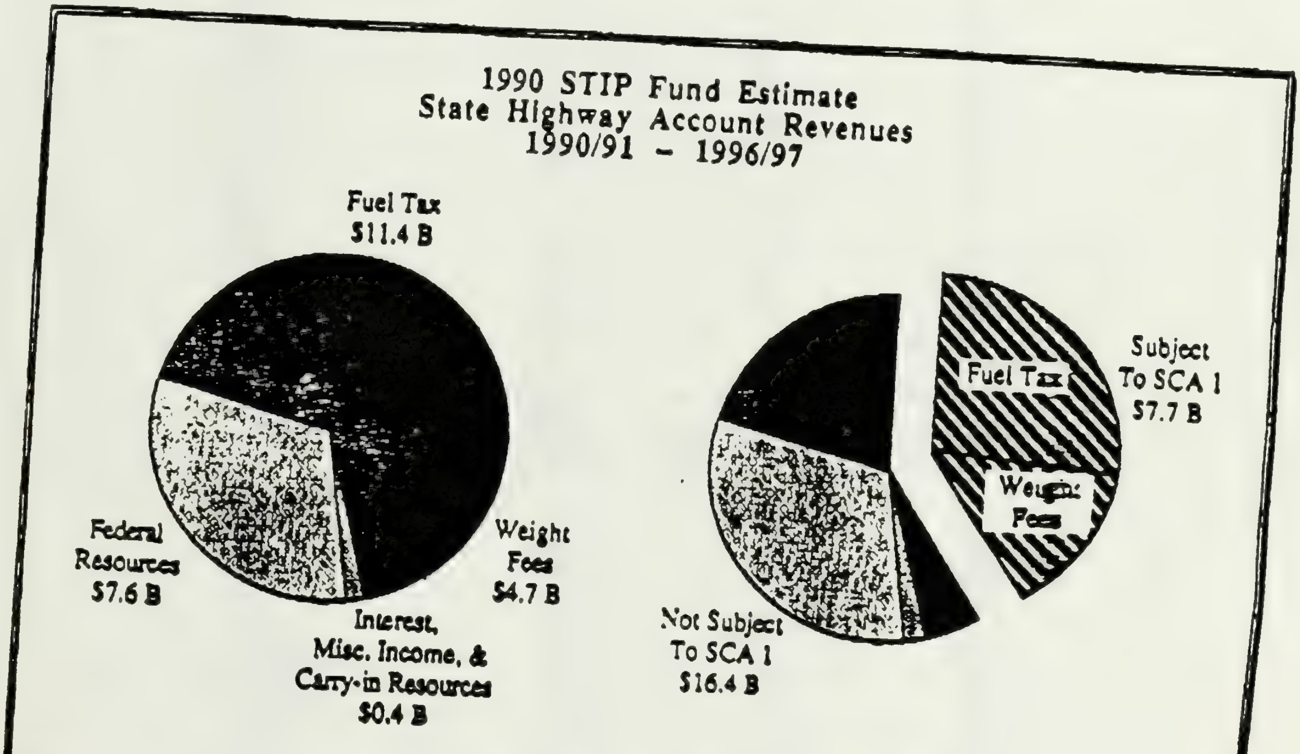
In accordance with the Methodology, the Fund Estimate is built on the assumption that SCA 1 will pass in June. This Fund Estimate shows that all the new programs can be funded given passage of SCA 1. The table on the previous page details the funding of the new programs during the seven-year STIP period.

Transportation Program Without SCA 1

Should SCA 1 fail, there would be a profound impact on the State transportation program. The only programs not directly affected by voter rejection of SCA 1 are the seismic retrofit and toll bridge efforts.

State Highway Account

Failure of SCA 1 will reduce available State resources by $7.7 billion, thus eliminating any opportunity to engage in any new programming of projects beyond those already in the 1988 STIP. In addition, there would be severe constraints on all the other Departmental programs. This decrease in available resources would occur at a time when many areas of California are reaching the point that delaying significant improvements in transportation facilities would result in gridlock for the foreseeable future.



1990 STIP Fund Estimate
State Highway Account Revenues
1990/91 – 1996/97

Distribution Of Funds Available For Capital Outlay
SCA 1 Passing Vs SCA 1 Failing
($Millions)

	STIP Total		
	SCA 1 Passes*	SCA 1 Fails	Loss*
NORTH			
Alameda	$298	$140	($157)
Alpine	8	4	(4)
Amador	17	8	(9)
Butte	53	25	(28)
Calaveras	19	9	(10)
Colusa	14	6	(7)
Contra Costa	176	83	(93)
Del Norte	13	6	(7)
El Dorado	38	18	(20)
Fresno	178	84	(94)
Glenn	16	7	(8)
Humboldt	58	27	(31)
Kings	33	16	(18)
Lake	22	10	(11)
Lassen	34	16	(18)
Madera	28	13	(15)
Marin	64	30	(34)
Mariposa	14	6	(7)
Mendocino	52	24	(28)
Merced	58	27	(30)
Modoc	19	9	(10)
Monterey	100	47	(53)
Napa	35	17	(19)
Nevada	25	12	(13)
Placer	44	21	(23)
Plumas	21	10	(11)
Sacramento	218	103	(115)
San Benito	15	7	(8)
San Francisco	174	82	(92)
San Joaquin	112	53	(59)
San Mateo	168	79	(89)
Santa Clara	349	165	(184)
Santa Cruz	59	28	(31)
Shasta	58	27	(31)
Sierra	10	5	(5)
Siskiyou	42	20	(22)
Solano	74	35	(39)
Sonoma	98	46	(51)
Stanislaus	84	39	(44)
Sutter	21	10	(11)
Tehama	29	14	(15)
Trinity	22	10	(11)
Tuolumne	23	11	(12)
Yolo	45	21	(24)
Yuba	19	9	(10)
Total North Co. Min	$3,052	$1,439	($1,612)
30% Discretionary	1,310	617	(693)
Total North Subject To N/B	$4,361	$2,056	($2,305)
SOUTH			
Imperial	$88	$41	($46)
Inyo	74	35	(39)
Kern	238	112	(126)
Los Angeles	1,910	901	(1,009)
Mono	54	25	(28)
Orange	495	233	(262)
Riverside	270	127	(143)
San Bernardino	411	194	(217)
San Diego	535	252	(283)
San Luis Obispo	97	46	(51)
Santa Barbara	120	57	(63)
Tulare	116	55	(61)
Ventura	170	80	(90)
Total South Co. Min.	$4,578	$2,159	($2,419)
30% Discretionary	1,964	925	(1,039)
Total South Subject To N/B	$6,542	$3,085	($3,458)
TOTAL STATE			
Total State Co. Minimums	$7,630	$3,599	($4,031)
30% Discretionary	3,274	1,542	(1,731)
Total Funds Subject To N/B	$10,904	$5,141	($5,763)
Exempt From N/B	2,748	359	(2,389)
Total Funds For C/O	$13,652	$5,500	($8,152)

* All data in the "SCA 1 Passes" and "Loss" columns are revised.

Note: Dollar Amounts Are Approximate And Assume No Change In Current Program Priorities
Detail May Not Add Due To Independent Rounding

Should SCA 1 fail, there will be no funding for new projects beyond those in the 1988 STIP. In addition, by the end of the seven-year STIP period:

- The North/South and County Minimum requirements will not be met.
- Depending on program priorities, California may lose Federal funds that were paid by California taxpayers.
- The 1988 STIP will not be fundable.
- There will be an annual erosion in the level of resources available to maintain the existing system. Therefore, deterioration of the existing system will occur more rapidly.
- Resources may not be available to fund the State's responsibilities for local tax measure projects.
- There will be a significant reduction in funding for support costs. Recovery from this loss will require 3 - 5 years after new funding becomes available.

Passenger Rail Bond Account

Each of the three, $1 billion general obligation bond issues for transit rail projects authorized by AB 973 are contingent upon voter approval of SCA 1. Therefore, if the voters approve the bonds, but defeat SCA 1, the bonds are not authorized and cannot be issued.

Transportation Planning & Development Account

Failure of SCA 1 will reduce TP&D funding by $291 million during the seven-year STIP period. As a result:

- State support of local transit improvements will be drastically reduced, which directly impacts transit available to the elderly, disabled, and inner-city residents.
- State resources will not be available to match Federal dollars. Therefore, local government will have to provide the match or lose the funds.
- Current annual funding for mass transit guideways will be eliminated.

Aeronautics Account

Funding for the aeronautics program will be $25.2 million lower if SCA 1 fails. Consequentially:

- The proposed increases in the local airport loan program will be eliminated; and
- Funding for the acquisition and development program will be eliminated by the middle of the STIP period.

Earthquake

The October 17, 1989 earthquake that occurred in the Northern California Bay Area caused widespread damage to the transportation system. The most noticeable damage involved the collapse of a large section of the Nimitz Freeway (I-880) and the dislocation of a section of the San Francisco-Oakland Bay Bridge. The earthquake also exposed the need for a more aggressive program to reinforce existing transportation structures so they can withstand the impact of an earthquake of the magnitude that occurred in October.

In response to the funding required to repair and restore the damaged structures and retrofit other structures, legislation was passed at the State and Federal level to provide $1.4 billion in new revenues for these activities. All of these revenues become available by December 31, 1991. Initial estimates of the cost involved in recovering from the devastating impact of the earthquake were $1.8 billion. This estimate was a "ballpark" guess based on the limited information available within 10 days after the earthquake and the estimate was prepared before the extent of the damage,

State of California

Business, Transportation and Housing Agency

Memorandum

To: Director
Deputy Directors
District Directors
Division Chiefs

Date: April 9, 1991

File:

From: DEPARTMENT OF TRANSPORTATION
Division of Budgets

Subject: California Transportation Financing Package (1991-92 Fiscal Year)

The California Transportation Financing package is prepared and distributed annually. The information, obtained from the 1991-92 Governor's Budget, summarizes the source and distribution of transportation funds at the State level in California. The details are summarized in the following charts:

Chart A - "Source and Distribution of California State Motor Vehicle and User Taxes"

Chart B - "Statutory Allocation of Annual Revenue - State Highway Account"

* Chart C - "Budgetary Flow of California State Fees and Taxes Designated by Law for Transportation Purposes (Systems)"

Chart D - "Distribution of Sales Tax Revenue"

One new feature to the State Transportation Fund is the addition of the Environmental Enhancement and Mitigation Demo Fund. Monies deposited in the Fund are used for environmental enhancement and mitigation projects.

Additional copies of this summary and charts may be obtained from Jeanne Jackson at (916) 445-0941 (ATSS 485-0941).

[illegible]

W. J. EVANS, Chief
Division of Budgets

Attachments
JJackson:dbs:je (JEANNE'S FOLDER) JJ/DISTRIBUTION MEMO 91/92

* Too large to fax. It will be part of package being sent with letter from director.

CALIFORNIA TRANSPORTATION FINANCING
1991-92

In January of each year, the Governor presents a proposed budget to the Legislature which contains the Administration's estimate of available revenue and a recommended expenditure plan. The State portion of California's transportation financing is also incorporated into the Administration's estimate. The budget, subject to the legislative review process, is usually finalized by late June as the Budget Act.

This document and the associated charts are based on the Governor's Budget as it was proposed to the Legislature in January 1991. Changes made during the legislative process are not reflected.

Transportation revenue is generated from user taxes and fees and is deposited in separate funds. Within the funds are several accounts which help facilitate the accounting of all receipts and expenditures.

Transportation Tax Fund (TTF)
- Motor Vehicle Fuel Account
- Highway Users Tax Account
- Motor Vehicle License Fee Account

State Transportation Fund (STF)
- Aeronautics Account
- Local Airport Loan Account
- Abandoned Railroad Account
- Bicycle Lane Account
- Motor Vehicle Account
- Transportation Planning and Development Account
- Seismic Safety Retrofit Account
- State Highway Account

Passenger Rail Bond Fund of 1990

Environmental Enhancement & Mitigation Demo Fund

TRANSPORTATION TAX FUND:

Motor Vehicle Fuel Account

Monies from the Use Fuel Tax (diesel) and Motor Vehicle Fuel License Tax (gasoline and aviation fuel tax) are collected and deposited in the Motor Vehicle Fuel Account. This money is distributed in the following manner:

o Agriculture Fund	$15,704,000
o Off-Highway Vehicle Fund	$20,000,000
o Aeronautics Account	$7,639,000
o Department of Boating and Waterways	$25,000,000
o Board of Equalization	$6,203,000
o State Controller	$2,699,000
o Reserve for Economic Uncertainties	$311,179,000
o Balance to Highway Users Tax Account	$2,250,857,000

Highway Users Tax Account

The monies transferred into the Highway Users Tax Account are distributed in the following manner:

o Cities and Counties	$344,392,000
o Counties	$292,766,000
o Cities	$214,282,000
o Bicycle Lane Account	$360,000
o Parks and Recreation Fund	$1,500,000
o State Controller	$403,000
o Balance to State Highway Account	$1,397,154,000

Motor Vehicle License Fee Account

The vehicle license fee, which is assessed at 2 percent of the market value of vehicles, and trailer coach in-lieu fees are collected and deposited in the Motor Vehicle License Fee Account. This money is distributed in the following manner:

o Department of Motor Vehicles	$169,465,000
o Cities	$943,492,000
o Counties	$2,324,243,000
o Reserve for Economic Uncertainties	$10,000,000

STATE TRANSPORTATION FUND:

Aeronautics Account

Monies from the Federal Trust Fund and Motor Vehicle Fuel Account are transferred into the Aeronautics Account and distributed in the following manner:

o State Operations	$3,252,000
o Transportation Planning & Development Account	$30,000
o Local Assistance	$2,320,000
o Reserve for Economic Uncertainties	$4,578,000

Local Airport Loan Account

The Local Airport Loan Account represents repayments and interest received on loans made by the Department to the local agencies for acquisition, construction, improvements, maintenance and operation of local airports.

o Local Assistance	$2,000,000
o Reserve for Economic Uncertainties	$419,000

Abandoned Railroad Account

The Abandoned Railroad Account was established to help the Department acquire abandoned railroad lines if the right of way of such lines has public transportation potential such as highways, busways, bicycle lanes, pedestrian lanes or guideways.

o State Operations, Mass Transportation Program	$0
o Transportation Planning & Development Account	$130,000
o Reserve for Economic Uncertainties	$0

Bicycle Lane Account

The monies deposited in the Bicycle Lane Account are used to help establish bikeways in conjunction with the state highway system.

o State Operations	$10,000
o Local Assistance	$630,000
o Reserve for Economic Uncertainties	$10,000

Motor Vehicle Account

Motor vehicle registration, drivers' licenses, weight fee collection costs, and off-highway vehicle registration revenues are deposited in the Motor Vehicle Account. These monies support the following:

o Sec. of Business, Transportation & Housing	$697,000
o Department of Justice	$16,446,000
o Judicial Council	$123,000
o Air Resources Board	$65,684,000
o Department of Motor Vehicles	$325,839,000
o California Highway Patrol	$605,928,000
o Department of Health Services	$352,000
o Office of Traffic Safety	$320,000
o Energy Commission	$1,231,000
o Reserve for Economic Uncertainties	$107,430,000
o Balance to State Highway Account	$0

Transportation Planning & Development Account

Revenue from sales tax on gasoline and diesel is distributed by formula to the State's General Fund, local agencies, and to the Transportation Planning and Development Account (see Chart D). Amounts deposited in the Transportation Planning & Development Account support the following:

	State Funds	*Federal Funds*
o State Operations	$52,412,000	$43,273,000
o Local Assistance	$147,089,000	$23,484,000
o Capital Outlay	$0	$43,593,000
o General Fund	$25,000,000	
o Reserve for Economic Uncertainties	$512,000	

Seismic Safety Retrofit Account

Monies deposited in the Seismic Safety Retrofit Account are used to inspect and develop seismic safety projects for publicly owned highways and road bridges.

o State Operations	$0
o Local Assistance	$10,827,000
o Capital Outlay	$34,200,000
o Reserve for Economic Uncertainties	$5,104,000

State Highway Account

Federal Trust Fund money is a major source of revenue for the State Highway Account in addition to State resources. Federal Funds shown in the Governor's Budget include amounts the Department anticipates receiving in Federal funds during the fiscal year plus future Federal fiscal year funds for projects which will be qualified for construction under Federal Advance Construction procedures.

The Federal aid which the Department receives for highways comes from Federal taxes which are collected in California, deposited in the Federal Highway Trust Fund, and are apportioned and allocated back to California through the Federal budget. Each Federal-aid highway project must be approved in advance by the Federal Highway Administration, and a Federal obligation of funds is required. It is only after this formal approval process and obligation that Federal funds are recovered by reimbursement procedures based on the monthly progress of work completed on each authorized Federal-aid project.

State Highway Account expenditures are distributed in the following manner:

	State Funds	*Federal Funds*
o State Operations	$1,374,986,000	$271,594,000
o Local Assistance	$99,100,000	$234,500,000
o Capital Outlay	$580,191,000	$719,702,000
o Motor Vehicle Account	$29,074,000	
o Department of Conservation	$12,000	
o Public Utilities Commission	$1,825,000	
o California Transportation Commission	$150,000	
o Shared Revenues/Rental Property Payments to Counties	$3,500,000	
o Transportation Planning & Development Account	$17,370,000	
o Environmental Enhancement & Mitigation Demo Fund	$10,000,000	
o Reserve for Economic Uncertainties	$945,000	

(For Capital Outlay expenditure limitations, see Streets & Highways Code 188)

PASSENGER RAIL BOND FUND of 1990:

Revenues from the sale of rail bonds are deposited in the Passenger Rail Bond Fund of 1990. The monies are distributed in the following manner:

o Capital Outlay	$329,777,000
o Reserve for Economic Uncertainties	$370,223,000

ENVIRONMENTAL ENHANCEMENT & MITIGATION DEMO FUND:

The Environmental Enhancement & Mitigation Demo Fund was created to fund environmental enhancement and mitigation projects which mitigate the environmental impact of modifying existing transportation facilities, or of designing, constructing or expanding new facilities. Monies received from the State Highway Account are deposited in the Fund and distributed in the following manner:

o State Operations	$120,000
o Local Assistance	$9,880,000

Attachments:

Chart A: Summarizes the source and distribution of the State motor vehicle and user taxes, and that of the State Highway Account.

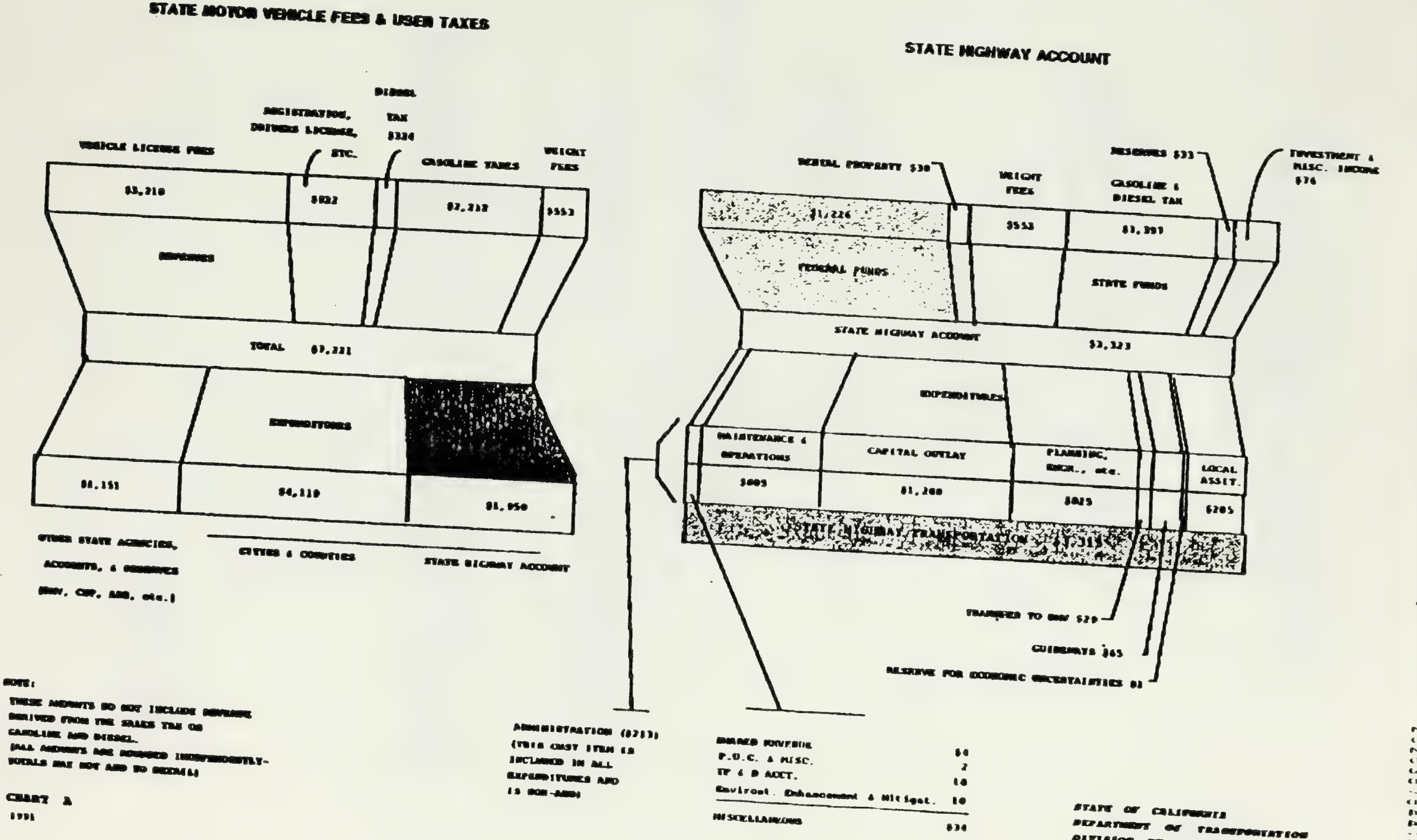
Chart B: A diagram showing the annual allocation of State Highway Account revenues.

Chart C: A diagram showing the budgetary flow of State Motor Vehicle fees and Highway User Taxes in California.

Chart D: Shows the distribution of Sales Tax revenues from Gasoline and Diesel Fuel sales to the Transportation Planning and Development (TP&D) Account.

SOURCE & DISTRIBUTION OF CALIFORNIA STATE MOTOR VEHICLE FEES & USER TAXES

1991-92 FISCAL YEAR
(IN MILLIONS OF DOLLARS)



NOTE:
THESE AMOUNTS DO NOT INCLUDE REVENUE DERIVED FROM THE SALES TAX ON GASOLINE AND DIESEL.
(ALL AMOUNTS ARE ROUNDED INDEPENDENTLY-TOTALS MAY NOT ADD DUE TO ROUNDING)

CHART A
1991

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF BUDGETS
REVENUE MANAGEMENT BRANCH

STATE HIGHWAY ACCOUNT ANNUAL ALLOCATION PROCESS

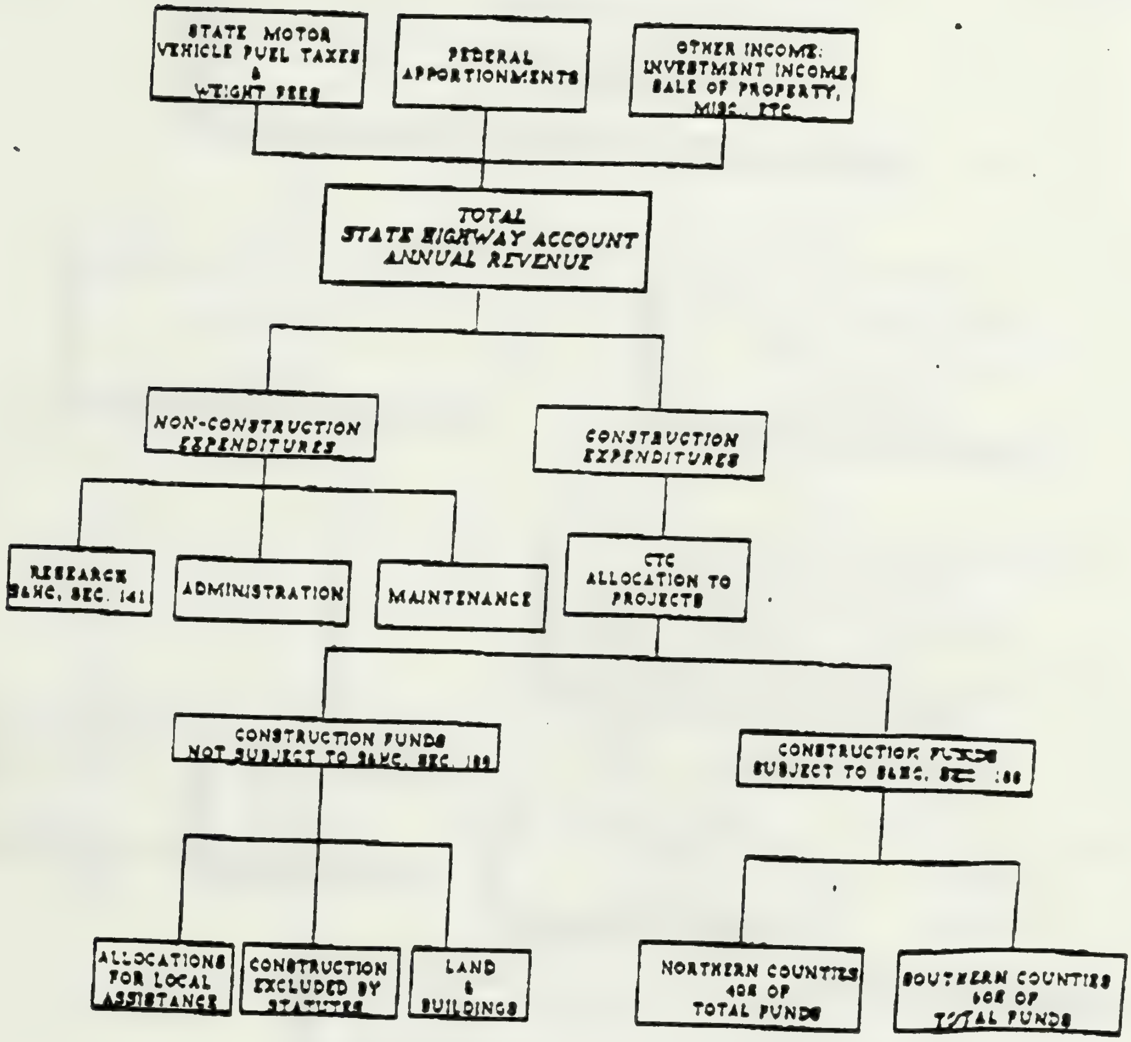
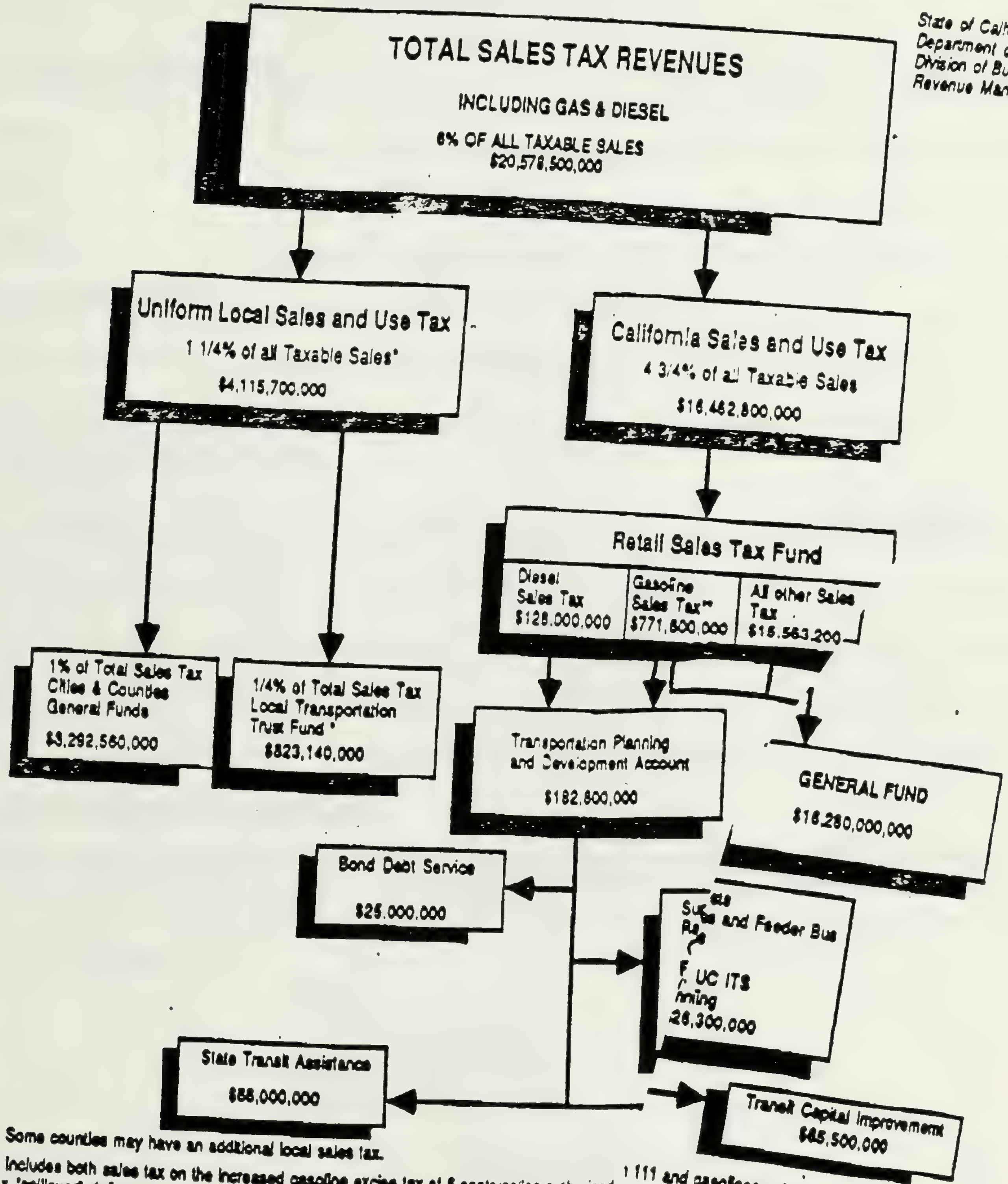

STATE MOTOR VEHICLE FUEL TAXES & WEIGHT FEES
FEDERAL APPORTIONMENTS
OTHER INCOME: INVESTMENT INCOME, SALE OF PROPERTY, MISC. ETC.
TOTAL STATE HIGHWAY ACCOUNT ANNUAL REVENUE
NON-CONSTRUCTION EXPENDITURES
CONSTRUCTION EXPENDITURES
RESEARCH S&HC. SEC. 141
ADMINISTRATION
MAINTENANCE
CTC ALLOCATION TO PROJECTS
CONSTRUCTION FUNDS NOT SUBJECT TO S&HC. SEC. 188
CONSTRUCTION FUNDS SUBJECT TO S&HC. SEC. 188
ALLOCATIONS FOR LOCAL ASSISTANCE
CONSTRUCTION EXCLUDED BY STATUTES
LAND & BUILDINGS
NORTHERN COUNTIES 40% OF TOTAL FUNDS
SOUTHERN COUNTIES 60% OF TOTAL FUNDS

CHART 3
1991

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF BUDGETS
REVENUE MANAGEMENT BRANCH

Distribution of Sales Tax Revenue

Dollar amounts are approximate and based on 1991-92 Governor's Budget
(All amounts are rounded independently - totals may not add to detail)


TOTAL SALES TAX REVENUES
INCLUDING GAS & DIESEL
6% OF ALL TAXABLE SALES
$20,578,500,000
Uniform Local Sales and Use Tax
1 1/4% of all Taxable Sales*
$4,115,700,000
California Sales and Use Tax
4 3/4% of all Taxable Sales
$16,462,800,000
Retail Sales Tax Fund
Diesel Sales Tax $128,000,000
Gasoline Sales Tax** $771,600,000
All other Sales Tax $15,563,200
1% of Total Sales Tax Cities & Counties General Funds $3,292,560,000
1/4% of Total Sales Tax Local Transportation Trust Fund * $823,140,000
Transportation Planning and Development Account $182,600,000
GENERAL FUND $16,280,000,000
Bond Debt Service $25,000,000
Su es Ra and Feeder Bus
F UC ITS hning
26,300,000
State Transit Assistance $68,000,000
Transit Capital Improvement $65,500,000

State of California
Department of Transpo
Division of Budgets
Revenue Management B

* Some counties may have an additional local sales tax.

** Includes both sales tax on the increased gasoline excise tax of 6 cents/gallon authorized 1 111 and gasolines sales tax "spillover" dollars

CHART D
March 1991

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

II. Background Information

1. Date	3/13/92
Name	Virginia Wendorf
Position	Manager, Financial Reporting & Analysis
State/Organization	Chicago Transit Authority
Phone Number	(312) 664-7200 Ext. 4511

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	Position	Phone Number

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

1991 (estimated)

	Millions of Dollars	
Fares	$321	28%
Other System Produced Revenues	50	04
State Sales Taxes	212	20
State General Fund	105	9
Federal Operating Asst.	42	4
Total Operations	$730	65%
Capital Grants	400	35
Total Revenues	$1,130	100%

4. How adequate are these sources?

Neither source is adequate. Operating Revenues have not kept pace with inflation, and many worthwhile activities must be curtailed.

Capital funding has increased in recent years but does not allow for sound asset renewal programs.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Within reason, fares can be adjusted for inflation. Anything greater than inflation will result in offsetting ridership declines, however. Sales taxes are economy-sensitive and have dropped sharply in 1991. Federal Operating Assistance is subject to annual appropriation and has decreased slightly in recent years.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

We have looked into cross-border lease arrangements, but have not been able to accomplish one. We have entered into some joint development activities. We are trying to find ways of utilizing extensive property holdings as revenue producers.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

We have minor lease purchases in operating areas. We are investigating the new ability to leverage grant funds by funding capital leases.

8. What criteria do you use in deciding when and how much debt to issue?

We are able to issue Revenue Bonds, Anticipation Notes, Equipment Trust Certificates and to enter into Lease/Purchase Agreements. Apart from minor Lease/Purchases, we have not issued debt since 1985. In general, RTA, our oversight funding agency, has better security and can issue debt at lower cost than CTA.

IV. Coordinating Functions/Operations

11. To what degree have you approached transit policy from an "intermodal" perspective? Please explain.

We cooperate with our sister service boards (suburban bus and commuter rail) along with Regional Planning & Oversight Authorities in regional issues. We cooperate with the City of Chicago in new transit planning. Operationally, we encourage inter-modal access and recognize some sister agency ticket mechanisms.

Do you "cross fund" projects with revenues generated from fares, fees, taxes, etc.? Please identify instances and explain rationale.

We do not cross-fund between operating and capital projects. Some cross-funding takes place at the financial oversight level.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

Please refer this question to Oversight Agency. We are one operating entity.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

II. Background Information

1. Date	March 5, 1992
Name	Jeff Thompson
Position	Principal Analyst
State/Organization	Regional Transportation Authority (RTA) - Chicago
Phone Number	(312) 917-1426

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	***Position***	***Phone Number***

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

1992 RTA Budget

Revenue	Total	Uses of Funds	
Sales Tax	52%	Operations	67%
FTA Operating	6%	Debt Service	3%
FTA Capital	14%	Capital Projects	30%
State Grants	20%		
RTA Bonds	8%		
	100%		100%

4. How adequate are these sources?

For the present time they are adequate, but projections indicate that if current trends continue unabated, we will experience financial difficulty in a few years.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Operating Expenses generally move with inflation as does the sales tax. Unfortunately, UMTA operating funds may not move with inflation depending on the national appropriation process. In addition, some expenses, especially in the area of medical insurance, have beenand are projected to continue to increase faster than inflation. The net result is that given the continuation of present trends, operating revenues will not keep pace with expense growth.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

We are only in the very preliminary stages of looking at revenue options for the future.

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

Yes. The RTA is authorized to issue a total of $1 billion of general obligation bonds. Debt service on these bonds is primarily funded from two sources: the RTA-imposed sales tax and Public Transportation Fund grants provided by the State. Debt service costs on $500 million of the $1 billion authorized are offset by an equivalent subsidy from the State. The reimbursement revenues from the State are not able to be pledged by the RTA to meet debt service costs.

8. What criteria do you use in deciding when and how much debt to issue?

In 1989, the Illinois legislature agreed to increase the RTA's total bond authorization from $400 million to $1 billion in recognition of the enormity of capital needs documented by the RTA. The RTA's policy has been to ensure that all of the $1 billion of bonds can be issued to begin to meet these needs. The RTA's service boards have identified projects to be funded with bondss and submit these projects to the RTA Board for approval. Once approved, the RTA issues debt as needed to meet expenditure requirements of these projects.

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? **Please explain.**

The RTA's service boards have considered joint development, but it has thus far not been used extensively. For example, the CTA was recently asked to participate in a joint development proposal on property adjacent to transit facilities. The CTA had been negotiating an equity position in the project until management changes resulted in a new approach to joint development. The CTA is now negotiating a lease arrangement with the private developer for the property it owns at the site. The suburban bus division, Pace, is also interested in joint development, and was considering a proposal for a transit/convention center to be developed with both public and private funds. When certain planned funding sources for the convention center were not forthcoming, Pace decided to go ahead with the transit center by itself. In addition to joint development, the RTA and the service boards have looked at other types of innovative financing, such as cross-border leases, to lower the cost of capital procurements. To date, however, neither the RTA or its service boards have successfully completed one of these transactions.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

The service boards are using private companies to provide fixed route bus service, mobility limited services, and security services. The region will be exploring further use of privitization to enhance efficiency and encourage savings.

IV. Coordinating Functions/Operations

11. To what degree have you approached transit policy from an "intermodal" perspective? Please explain.

The RTA's transit system is an integral part of the northeastern Illinois economy and transportation network. Therefore, the RTA strives for a regional approach to transit policy, which includes an intermodal perspective. Examples, include participation in the development of the region's long-range comprehensive transportation plan, high occupancy vehicle study, third regional airport site selection, seed funding for transportation management associations, and clean air related activities such as employer trip reduction and demand management.

12. Do you "cross fund" projects with revenues generated from fares, fees, taxes, etc.? Please identify instances and explain rationale.

No.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

The RTA is an oversight agency; it allocates resources and analyzes performance of the three service boards (CTA, Metra and Pace). It does not directly operate service. In its oversight role, the RTA does coordinate and consolidate some functions performed separately by the service boards, such as capital planning. We will be actively investigating administrative/management functions that could be performed centrally to achieve greater efficiency and cost savings.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION

Transportation Issues Survey

II. Background Information

1. Date	March 17, 1992
Name	Janice M. Hedemann
Position	Manager, Financial Planning, Office of Finance
State/Organization	Maryland Department of Transportation
Phone Number	(301) 859-7183

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	*Position*	*Phone Number*

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

The Transportation Trust Fund incorporates all sources of revenue. Expenditures for the various modes of transportation funded by the Maryland Department of Transportation (MDOT) are allocated from the Trust Fund. Funds are not earmarked for specific modes. See the attached table which presents the sources and uses of funds for FY1991. The Mass Transit Administration (MTA) is operated by MDOT; operating expenditures are offset by fares and federal aid collected by MDOT for the bus and urban rail components. The commuter rail component of MTA includes the payment to a private operator after fares are deducted. MDOT pays the net costs for the Washington Area Transit (WMAT), after fares and federal aid are deducted. The Washington area transit authority and local governments collect the fares and federal aid. MDOT does not operate the transit in the Washington area.

4. How adequate are these sources?

The Transportation Trust Fund provides flexibility in funding capital projects. The MTA capital expenditures have been higher in recent years due to the construction of a major light rail transit project. The future capital program funds systems preservation only; capacity enhancements will require a revenue increase.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Most of the sources of funds are not inflation-sensitive and only increase moderately. The operating programs requires a 50 percent cost recovery, which encourages providing services efficiently.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

The Department is currently supporting a bill in the state legislative session which would increase the motor fuel tax 5 cents and add a 3/4 cent diesel surcharge.

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

The net revenues of the Transportation Trust Fund are used to support debt. Net revenues do not include federal capital assistance and subtract operating expenditures.

8. What criteria do you use in deciding when and how much debt to issue?

- The agreement with the bondholders includes a 2.0 coverage. The Department manages to a minimum of 2.5 in any year of the 6-year program.

- The Department is currently limited to a $950 million bonds outstanding cap which is a statutory requirement.

- The Department prepares a 6-year financial plan which includes bond sales which meet the above parameters and meets capital program objectives.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

Refer to attachment.

To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

Refer to attachment.

IV. Coordinating Functions/Operations

11. To what degree have you approached transit policy from an "intermodal" perspective? Please explain.

Within the greater Baltimore/Washington area there is a comprehensive network of highways and transit that are a part of a planned grid of transportation facilities. The Department goal is to provide a fully integrated highway and transit system aimed at increasing the person-carrying capacity of the surface transportation network in each corridor. The Department has initiated Commuter Action Teams in nine areas of the State to accomplish this goal.

12. Do you "cross fund" projects with revenues generated from fares, fees, taxes, etc.? Please identify instances and explain rationale.

All revenues are combined into the Trust Fund before allocations are made to the various modal administrations.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

The Maryland Department of Transportation is organized with a headquarters division coordinating and setting policy for its modal administrations. The modal administrations are the operating divisions of the Department. Headquarters manages the Transportation Trust Fund, prepares a Department-wide operating and capital budget, and develops a 6-year capital program for the entire Department. Input is provided by the various modal administrations.

Maryland Department of Transportation
FY 1991
(millions of dollars)

Sources of Funds

Licenses & registrations	147
Titling Tax	289
Motor Fuel Tax	444
Corporate Income Tax	69
Miscellaneous Motor Vehicle	41
Federal-aid	372
Other	328
Bond Sales	310
Total	2,000

Uses of Funds

Local governments & deductions	306	
Transfer to General Fund	22	
Debt Service	67	
Operating Expenditures	581	
highway (SHA)		143
transit (MTA)		182
transit (WMAT)		57
motor vehicle (MVA)		73
port (MPA)		43
aviation (MAA)		35
other		48
Capital Expenditures	1,024	
highway (SHA)		695
transit (MTA)		251
transit (WMAT)		26
motor vehicle (MVA)		3
port (MPA)		10
aviation (MAA)		37
other		2
Total	2,000	

MTA PROJECTS INVOLVING PRIVATE SECTOR PARTICIPATION AND COOPERATION

1. NATURAL GAS BUSES - This is a capital project involving the development of specifications, purchase and testing of natural gas buses, and the construction of fueling station modifications. The total cost of this project is estimated at $3,000,000. The MTA has received a $200,000 contribution from the Baltimore Gas & Electric Company (BG&E) to be used towards the cost of the project.

2. OWINGS MILLS MASTER PLAN - The MTA, through a consultant, has prepared a joint development master plan for the property adjacent to the Owings Mills Metro Station. This property consists of the air right areas above the completed surface parking lots. Upon approval by the Governor, the MTA will issue a request for proposals to solicit private sector developer interests. This project could yield $1.4 million per year.

3. STATION SPONSORSHIP - This includes the development and implementation of a program for private corporate sponsorship of Baltimore Metro stations and Central Light Rail stops. Revenues received from private funds will be used to provide additional amenities in the stations. The project is underway with the consultant currently in the process of soliciting potential sponsors. This project could yield $2 to $4 million per year when fully developed.

4. REISTERSTOWN PLAZA METRO - SETON JOINT DEVELOPMENT - The MTA is currently seeking private investors for joint development on 5.5 acres of property at the Seton Industrial Park at Reisterstown Plaza Metro Station.

5. CHARLES CENTER METRO - The MTA is receiving income from two development agreements for the property adjacent to the Charles Center Metro Station. In 1984, an air-rights agreement was made for the development of the Union Trust Building at Charles and Baltimore. In 1985, an agreement was made for development of the Bank of Baltimore building on the Calvert and Baltimore Street property. This agreement yields $580,000 per year from The Bank of Baltimore and Signet Bank.

6. CROSS-BORDER LEASE - MDOT is negotiating a potential cross-border lease agreement for the vehicles being purchased for the Central Corridor Light Rail project; this transaction allows U.S. owners of capital equipment to share foreign tax benefits. In addition, MDOT is attempting to structure a similar transaction for 25 rail cars in support of MARC services.

CONTRACT BUS SERVICE

Private bus operators provide commuter bus service for the MTA under individual contracts for specific routes. These services are provided under the MTA's Statewide Commuter and Suburban Bus Programs

The Statewide Commuter Buses serve riders travelling from the rural and suburban areas around the state to the Washington Metropolitan area. Suburban Buses serve riders travelling between Baltimore City's outlying areas and the central city.

Service Area	Provider	Projected Cost FY 1992	Route #
Charles/St Mary's Co. to Washington D.C.	American Coach	$250,000	905
Annapolis to Wash. D.C.	Dillon Bus Service	$142,000	922
Howard County to Silver Spring	Eyre Bus Service	$769,000	929
Annapolis to New Carrollton	American Coach	$173,000	921
Hagerstown to Shady Grove	American Coach	$336,000	991
Columbia to Wash. D.C.	Eyre Bus Service	$191,000	995
Calvert County to Washington D.C.	American Coach	$161,000	904
Columbia to Baltimore	Eyre Bus Service	$116,000	310/311
Laurel to Baltimore	Dillon Bus Service	$250,000	320
Belair/Havre de Grace to Baltimore	Intercounty	$194,000	410/411 & 420

These numbers assume no service changes throughout the fiscal year.

SRA - PROJECTS INVOLVING PRIVATE SECTOR PARTICIPATION

Other Party Contribution in (Parenthesis)

Agreement Project Description	Completion Year	Other Party	Right of Way	Preliminary Engineering Design	Construction	Federal Aid	Total Project Amount
Union Station High Level Platform	FY 92	AMTRAK	Zero	Zero	1,700,000 (136,000)	1,360,000	1,700,000 (136,000)
CSX Traffic Control	FY 93	CSX-Transportation	Zero	425,000 (53,000)	10,497,000 (1,337,000)	8,192,000 (Zero)	10,922,000 (1,390,000)
Brunswick Station Building	FY 92	Town of Brunswick Grant	50,000 (50,000)	7,000	35,000	Zero	92,000 (50,000)
Germantown Station Parking Lot	FY 92	Montgomery County	800,000 (800,000)	75,000	1,158,000	Zero	2,033,000 (800,000)
Germantown Station Building	FY 91	Montgomery County	Zero	5,000 (5,000)	100,000 (100,000)	Zero Zero	105,000 (105,000)
Barnesville Station Parking	FY 91	Montgomery County	60,000 (60,000)	60,000	300,000	Zero	420,000 (60,000)
MARC Service Operations	Continuing	Amtrak/CSXT	----	----	----	----	6,500,000 *

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* SRA contracts with two railroads for provision of MARC Service. Railroads operate, dispatch and maintain equipment as well as own and maintain the rail lines. Annual payments by SRA to railraods are $6.0 - $7.0 million. MARC service is different from most other commuter rail services in that we have private operators.

Private Participation in Motor Vehicle Administration (MVA) Capital Projects

The building of MVA's new office system has represented a government/private sector partnership. Under the procurement method used to award the contracts for five of the new full-service branch offices, developers have financed the construction privately through the sale of certificates of participation. The Department, under this structure, has not had to advance the capital construction costs for these buildings and is, in effect, leasing them from the developer/trustee. MVA will own the facilities at the end of the lease term or sooner, if the Department elects to exercise certain "buyout" options. Specifics on the five projects funded through private participation are:

Project	Construction Cost	Annual Payment	End of Term	Open to Use
Bel Air	$2.3 Million	$229,764	10,2014(30 yrs)	6/1/87
Cumberland	$3.2 Million	$327,996	*11/2017(30 yrs)	2/1/88
Hagerstown	$2.4 Million	$246,036	1/2003(15 yrs)	11/88
Salisbury	$2.0 Million	$216,493	12/2002(15 yrs)	10/88
Annapolis	$2.6 Million	$264,072	1/2003(15 yrs)	9/88

***Only project currently programmed for buyout ($3.2 Million in FY 1993).**

The construction and renovation of several other full-service facilities have also involved developer/owner assistance, though not employing the certificate of participation financing method. The Largo and Baltimore City full-service branch offices were constructed in 1982 and opened to the public in January, 1983. These facilities, built to MVA specifications, were financed by the contractors under straightforward lease arrangements with options to buy. MVA exercised those options in the Spring of 1986 and purchased the facilities (Largo at $2.2 M and Baltimore City at $1.5 M). The recently completed Waldorf expansion/renovation project has been accomplished in this manner also. The lease includes buyout options at the 5th year.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

1. Background Information

Date	February 28, 1992
Name	Jon Bloom, Director
Position	Highway and Area Planning
State/Org	Minnesota Department of Transportation
Phone	(612-296-1635

2. Other participants in the interview

Mark Levenson	Planner	(612)-296-8535
Jerry Skelton	Planner	(612)-297-5205

3. Funding/financing techniques

The following pertains to highway funding sources in FY 1991:

Federal Aid	26.2%
Motor Fuel Taxes	35.4%
Vehicle Registration Fees	23.2%
Interest	1.0%
Miscellaneous	14.2%

	100.0%

The following pertains to the allocations between construction and operations & maintenance for FY 1990:

Capital improvements	65.3%
Maintenance	16.7%
Other	18.0%

	100.0%

4. Adequacy of sources

Current funding sources are inadequate to meet long term needs. There is a need to stabilize the highway program through additional revenue sources. Over the next 20 years, highway construction needs will be about ~~[illegible]~~ $28 billion, with only half achievable at current funding levels. It is hoped that the new ISTEA Act will allow for higher funding levels and increased program flexibility.

5. Funding sources and cost

Our primary sources of funding are motor fuel taxes and motor vehicle registration fees. Both, as currently structured cannot keep pace with inflation. Fuel consumption is declining and motor vehicle registration and license fees are based on flat rates, and do not increase with inflation unless special action is taken by the legislature. Operations are more important than improvements. Therefore, our operating costs will be adequate, but at the expense of our improvement needs.

6. New funding sources
Among the new funding sources under consideration are increasing and reinstating the motor vehicle excise tax, motor fuel tax indexing, privatization funding, 5 cent a gallon gas tax increase, 20% increase in heavy truck fees, wholesale tax on motor fuel, and a sales tax on motor vehicle repair labor costs. These are all under consideration, but we are not pushing any at this time.

7. Funding sources used to leverage debt
In Fiscal Year 1990, the State Trunk Highway Fund had about $722 million dollars. Debt Service expenditure was about $13.9 million. Thus, about 2% of the Highway Fund is applied to debt. The Highway Fund, in turn comes from the previously listed revenue sources(question #3).

8. Criteria for debt
Paybacks are limited by Mn/DOT's Debt Management Schedule or $10 million maximum per year. Payback will be for total amount unless the Debt Management Schedule balance isn't sufficient. In the case of insufficient balance in the Debt Management Schedule, the payback may be spread over two years or more, but in no case more than 10 annual installments.

9. Innovative financing sources
~~Current Minnesota law allows local governments to accelerate long term improvement to the state's transportation system by paying for improvements. State repays, at no interest, according to "normal" improvements schedule. Dollar cap on allowable improvements is controlled by debt ceiling.~~ n/A

10. Privatization techniques
Mn/DOT is utilizing private and other governmental funds. The two most successful applications are planning and design agreements and construction agreements. Planning and design agreements are negotiated agreements between Mn/DOT, cities, and counties and usually involves design and environmental work. Construction agreements involve local communities, whereby they improve their public works systems. It usually involves the local communities that affect adjacent highways. The locals are responsible for contracts and construction and Mn/DOT funds a fair share of highway improvements.

See attach

11. Intermodal perspective
We have a newly created intermodal function that currently addresses multi-modal issues, conflicts and opportunities, and is attempting to produce a coordinated inter modal planning approach. As the "operations" end of Mn/DOT(all the district construction and maintenance offices) face more and more non-highway opportunities and requests, it is expected that the Department will become intermodal.

12. "Cross funding" of projects with revenues

Currently, cross funding of projects does not exist. Intermodal planning assumes(and ISTEA all but assures) that cross funding is coming. Just having flexibility now between federal highway and transit funds means that transportation needs will have to be "intermodally" planned.

13. Coordination/integration of administrative functions

Mn/DOT is probably in the latter stages of 30 years of decentralizing all functions. Administrative or management functions have recently been affected. The budget process was decentralized through our district construction and maintenance offices a few years ago, and is currently in the process of decentralization through the rest of the Department.

Decentralization is seen as the best way to make lowest levels possible accountable(performance measures), while giving them the resource controls and responsibilities they need to do their job.

MINNESOTA DEPARTMENT OF TRANSPORTATION

FINANCIAL REPORTS

JANUARY 31, 1992

FINANCIAL REPORTING UNIT
FEBRUARY 27, 1992

HIGHLIGHTS

TRUNK HIGHWAY FUND

		PAGE
A	State Funds Revenue through January is $2.4 million more than forecast, including $1.0 million over for Motor Vehicle Registrations, $2.3 million over for Motor Fuel Revenue, and $2.4 million over for Other Income. Driver License Fees are $.7 million under forecast and Investment Income is $2.6 million under forecast.	1,2,3

NOTE: THESE STATEMENTS HAVE NOT BEEN AUDITED
AND ARE FOR DEPARTMENTAL USE ONLY.

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MINNESOTA DEPARTMENT OF TRANSPORTATION
TRUNK HIGHWAY FUND
BALANCE SHEET
JANUARY 31, 1982

26-Feb-82

RESOURCES

Cash and Investments		$ 177,425,150
Advance to Dept. of Labor and Industry		74,013
Accounts Receivable (1)		2,477,808
Accounts Receivable - Corp of Engineers		5,112
Accounts Receivable - City of Bloomington		185,185
Accounts Receivable - City of Minneapolis		908,084
Federal Aid Receivable		2,088,130
Federal Aid Agreements (2)		217,382,274
Due from Other Funds		0
Estimated Advances - City of Bloomington	$ 83,500,000	
Less: Amount Billed To Date	(82,380,677)	
Balance		1,119,323
Estimated Revenue - State Funds	$ 529,437,941	
Less: Revenue	(315,848,036)	
Plus: Revenue Greater Than Forecast	2,461,114 A	
Balance		216,041,019
Federal Aid Programmed - Highway Improvement	$ 229,700,000	
Less: Agreements Executed (2)	(53,204,256)	
Balance		176,495,744
Agreements - Corps of Engineers	$ 29,080,000	
Less: Amount Billed To Date	(28,808,737)	
Balance		271,263
Total Resources		$ 788,301,807

LIABILITIES, APPROPRIATIONS, AND FUND BALANCE

Liabilities:		
Warrants Payable	$ 1,088,858	
Advances from City of Minneapolis	19,676,823	
Due To Other Funds	(250,388)	
Deferred Revenue	89,814	
Engineering Liability for Subsequent Years	28,800,800	
Total Liabilities		$ 49,294,808
Appropriations	$ 807,754,244	
Less: Expenditures	(248,070,130)	
Less: Encumbrances	(288,187,892)	
Unencumbered Balance		272,488,122
Fund Balance:		
Reserve for Encumbrances for Current Year	$ 288,187,892	
Reserve for Encumbrances for Prior Years	148,523,384	
Reserve for Advance to Dept. of Labor and Industry	74,013	
Unreserved Fund Balance	28,735,608	
Total Fund Balance		487,038,877
Total Liabilities, Appropriations, and Fund Balance		$ 788,301,807

---

(1) Does not include the allowance for doubtful accounts ($480,807) and the restitution accounts that are not currently on the accounts receivable system. The estimated amount of restitution accounts not on the system on June 30, 1981 were $730,807 with an offsetting allowance for doubtful accounts of $481,781.

(2) Includes unprocessed agreements from the October 25, and December 20, 1981 and January 24, 1982 lettings - $10,587,041.

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRUNK HIGHWAY FUND
COMPARATIVE STATEMENT OF REVENUE AND EXPENDITURES
JANUARY 31, 1982

Date Prepared 27-Feb-82

	CURRENT YEAR FY 1982 JANUARY ESTIMATED	CURRENT YEAR FY 1982 JANUARY ACTUAL	CURRENT YEAR FY 1982 YEAR TO DATE ESTIMATED	CURRENT YEAR FY 1982 YEAR TO DATE ACTUAL	PRIOR YEAR FY 1981 YTD ACTUAL	PRIOR YEAR FY 1981 TOTAL YEAR ACTUAL	CURRENT YEAR FY 1982 YTD ACTUAL + REMAINING BUDGET	CURRENT YEAR FY 1982 TOTAL YEAR BUDGET
BEGINNING BALANCES								
Cash and Investments		$ 187,827,288		$ 248,448,876				
Accrued Interest		0		1,718,442				
Due From Other Funds		0		7,881,862				
Warrants Payable		(1,423,860)		(1,884,115)				
Accounts Payable		0		(83,878,250)				
TOTAL BEGINNING BALANCES		$ 185,803,348		$ 180,381,844				
ADD REVENUE								
Highway User Tax								
a) Motor Vehicle	$ 17,810,011	$ 20,826,047	$ 113,114,881	$ 114,070,844	$ 100,480,321	$ 180,873,408	$ 186,180,082	$ 184,828,100
b) Motor Fuel	21,779,082	23,480,788	160,741,711	163,101,710	162,177,180	283,840,278	280,132,883	285,772,864
Total Highway User Tax	$ 38,581,463	$ 44,376,848	$ 273,858,672	$ 277,178,254	$ 265,085,520	$ 460,713,771	$ 463,322,545	$ 460,080,863
Driver License Fees	1,080,750	1,843,370	11,205,860	10,817,700	11,172,247	19,138,866	18,828,860	18,215,000
Investment Income	800,000	882,436	8,800,000	7,186,664	11,480,795	20,186,808	18,780,864	13,400,000
Other Income	2,408,200	3,022,312	18,834,480	20,886,020	20,830,738	30,431,480	$ 34,853,188	32,221,870
Total State Fund Revenue	$ 44,480,413	$ 50,203,872	$ 313,388,822	$ 315,848,038	$ 308,077,221	$ 530,487,408	$ 527,280,856	$ 524,837,941
Federal Aid	12,800,080	3,151,262	137,080,000	148,012,174	157,151,873	187,863,041	181,012,174	180,000,000
Corps of Engineers	0	2,102	0	47,140	81,411	82,432	47,140	0
Advances from Cities	1,805,800	854,000	13,801,000	14,178,800	12,801,737	21,478,128	23,438,000	23,102,000
TOTAL REVENUE	$ 58,385,413	$ 54,290,084	$ 464,287,882	$ 478,088,230	$ 478,082,042	$ 740,080,086	$ 741,788,080	$ 728,888,041
LESS EXPENDITURES & TRANSFERS OUT								
State Road Construction	$ 18,400,000	$ 18,533,330	$ 282,100,000	$ 287,172,865	$ 276,413,280	$ 370,412,203	$ 370,472,826	$ 386,400,000
Design Engineering	4,000,000	4,020,676	25,000,000	28,388,632	25,450,283	46,486,236	46,388,882	52,000,000
Construction Engineering	5,000,000	4,883,465	38,000,000	38,338,678	30,487,916	60,702,824	62,308,678	65,000,000
State Road Operations	12,000,000	12,840,232	84,000,000	78,874,131	78,800,857	131,828,808	138,874,131	144,000,000
Rail, Transit, Mtr. Carrier, State Aid	200,000	313,810	2,400,000	1,880,181	1,085,877	3,823,834	3,080,181	4,000,000
Equipment & General Services	3,500,000	4,510,400	23,300,000	22,177,000	27,080,047	47,388,850	38,177,000	40,200,000
Other Departments	8,000,000	4,743,608	48,000,000	38,212,171	37,084,678	64,112,542	68,212,171	70,000,000
Capital Improvements & Buildings	500,000	322,227	2,800,000	3,080,440	6,710,854	10,778,082	8,180,440	8,800,000
Reimbursements from Other Funds	(1,743,000)	(1,743,000)	(1,743,000)	(1,743,000)	0	(1,616,000)	(1,743,000)	(1,743,000)
Total Expenditures	$ 40,457,000	$ 44,510,783	$ 511,567,000	$ 470,880,704	$ 480,716,058	$ 741,880,055	$ 734,489,704	$ 775,887,000
Operating Transfers								
To Debt Service	$ 0	$ 0	$ 13,747,000	$ 13,887,350	$ 8,831,817	$ 8,881,817	$ 13,887,380	$ 13,747,000
TOTAL EXPENDITURES & TRANSFERS OUT	$ 40,457,000	$ 44,510,783	$ 525,304,000	$ 484,887,142	$ 485,847,878	$ 750,820,202	$ 748,487,142	$ 788,884,000
ENDING BALANCES								
Cash and Investments		$ 177,380,500		$ 177,380,500				
Warrants Payable		(1,880,850)		(1,880,850)				
		$ 175,500,641						

Date Prepared: 28-Feb-92

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRUNK HIGHWAY FUND
ANALYSIS OF CHANGES IN FUND BALANCE
JANUARY 31, 1992

Unreserved Fund Balance - July 1, 1991		$ 81,018,038
Estimated Revenue		
State Funds	$ 529,437,941	
Federal Aid Programmed - Highway Improvement	226,700,000	
Estimated Advances From City of Bloomington	2,500,000	
Total Estimated Revenue	758,637,941	
Appropriations and Other Financing Uses		
State Road Construction	388,016,510	
Design Engineering	57,482,728	
Construction Engineering	86,808,660	
State Road Operations	143,188,202	
Rail, Transit, Mtr. Carrier, State Aid	4,258,128	
Equipment and General Services	53,088,880	
Other Departments	87,538,816	
Capital Improvements and Buildings	18,527,306	
Total Appropriations	807,764,244	
Reimbursements (from)/to Other Funds	(1,743,000)	
Transfers Out to Debt Service Fund	13,747,000	
Total Appropriations and Other Uses	819,768,244	
Appropriations and Other Financing Uses in Excess of Estimated Revenue		(61,128,303)
Other Changes in Unreserved Fund Balance		
Revenue Greater Than Forecast	2,461,114 A	
Change in Reserve for Encumbrances for Prior Years	3,851,228	
Reserve for Appropriations Carried Forward	7,898,182	
Federal Aid Agreement Balances	(851,005)	
Increase in Engineering Liability	(500,000)	
Increase/(Decrease) in Accounts Receivable	(3,174,027)	
Prior Period Adjustment	(123,534)	
Changes in Deferred Revenue	(11,183)	
Total Other Changes in Unreserved Fund Balance		9,837,775
Unreserved Fund Balance - January 31, 1992		$ 28,735,508

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRUNK HIGHWAY FUND
ACCOUNT DETAIL REPORT
JANUARY 31, 1992

Date Prepared: 08-Feb-92

Page 1 of 2

	PRIOR YEARS				FISCAL YEAR 1992				
	6/30/91 ENCUMBRANCES	YEAR TO DATE EXPENDITURES	1/31/92 ENCUMBRANCES	CREDIT(CHARGE) TO FUND BAL.	APPROPRIATIONS	YEAR TO DATE EXPENDITURES	1/31/92 ENCUMBRANCES	UNENCUMBERED BALANCE	TOTAL EXPENDITURES
STATE ROAD CONSTRUCTION									
Highway Improvement	$ 318,248,845	$ 294,858,301	$ 110,404,867	$ 1,488,087	$ 388,202,000	$ 92,874,292	$ 114,292,888	$ 223,234,840	$ 358,832,832
Advance Right of Way	0	0	0	0	98,072	0	0	98,072	0
State Bridge Constr. Bonds	0	0	0	0	91,302	0	0	91,302	0
Fund 87 Prior Year CHE Encumb.	30,481,782	7,258,000	31,184,887	1,829,038	0	0	0	0	7,258,000
Highway Program	69,319	69,319	0	0	2,109,482	1,180,515	928,785	23,282	1,212,834
Transportation Data Analysis	698,810	185,022	478,212	5,294	3,200,800	1,801,808	1,888,722	91,888	1,780,831
Federal/State Safety	13,794	8,800	0	3,814	910,834	72,918	81,482	904,784	82,418
Total, State Road Construction	$ 289,488,288	$ 211,784,881	$ 142,137,488	$ 2,981,231	$ 398,616,910	$ 95,488,224	$ 117,088,788	$ 224,141,488	$ 287,172,886
DESIGN ENGINEERING									
Program Delivery	$ 11,887,340	$ 8,491,185	$ 4,889,835	$ 813,117	$ 57,407,726	$ 20,887,390	$ 23,891,808	$ 12,648,884	$ 29,288,592
Transportation Research	0	0	0	0	75,000	0	82,980	52,000	0
Total, Design Engineering	$ 11,887,340	$ 8,491,185	$ 4,889,835	$ 813,117	$ 57,482,726	$ 20,887,230	$ 23,874,808	$ 12,701,384	$ 29,288,532
CONSTRUCTION ENGINEERING									
District Construction Support	$ 989,800	$ 481,318	$ 86,343	$ 143,247	$ 66,099,560	$ 36,876,258	$ 29,828,240	$ 1,398,062	$ 38,338,578
Total, Construction Engineering	$ 989,800	$ 481,318	$ 86,343	$ 143,247	$ 66,099,560	$ 36,876,266	$ 29,828,240	$ 1,398,062	$ 38,339,578
STATE ROAD OPERATIONS									
Road Program (PLP)	0	0	0	0	283,229	81,058	89,944	113,229	81,058
Maintenance Operations	4,032,427	3,031,718	631,384	188,330	142,832,873	76,701,266	58,880,612	7,870,868	79,783,876
Total, State Road Operations	$ 4,032,427	$ 3,031,718	$ 631,384	$ 188,330	$ 143,106,082	$ 76,842,421	$ 58,960,556	$ 7,984,095	$ 79,874,131
RAIL, TRANSIT, MTR. CARRIER, STATE AID									
Rail Service Plan. & Prog.	$ 6,851	$ 2,848	$ 1,174	$ 2,881	$ 888,000	$ 488,496	$ 482,884	$ 18,840	$ 458,312
Transit Planning and Evaluation	884	884	0	0	299,000	132,841	127,888	8,448	133,475
Common Carrier Rate Reg.	76,767	60,888	6,326	18,873	1,880,000	808,238	778,876	92,888	888,847
Limousine Services	0	0	0		75,000	0	44,888	38,100	0
Interstate Motor Carrier	7	7	0	0	200,128	21,087	178,913	128	21,894
State Aid Administration	24,418	22,788	888	411	1,100,000	483,470	888,912	86,819	817,383
Total,Rail,Transit,Mtr Carr,State Aid	$ 100,892	$ 78,888	$ 7,788	$ 21,816	$ 4,288,128	$ 1,992,160	$ 2,130,894	$ 218,780	$ 1,888,197
EQUIPMENT & GENERAL SERVICES									
Equipment	$ 4,069,678	$ 3,898,788	$ 376,918	$ 98,882	$ 19,780,353	$ 2,848,135	$ 8,888,881	$ 8,448,287	5,813,865
Administration	868,831	181,864	18,788	91,888	98,625,721	8,238,278	7,871,039	818,412	$ 8,418,288
Trunk Highway Refunds	0	0	0	0	100,000	34,070	65,830	18,888	34,070
Tort Claims	188,888	188,888	0	0	880,000	378,804	271,188	0	488,804
Legislative Claims	0	0	0	0	29,488	29,488	0	0	29,488
Statewide Indirect Costs	0	0	0	0	3,000,000	1,480,000	1,880,000	0	1,488,000
General Services	364,781	169,578	178,000	10,211	8,833,000	3,125,444	2,880,878	617,337	3,282,814
EDP Development	210,786	129,488	38,684	44,879	1,743,000	188,668	293,848	1,318,387	288,848
Legal Services	59,862	5,883	14,051	6,888	1,116,000	881,286	408,932	133,803	887,188
Electronic Communications	12,038	11,488	848	1	3,858,298	1,763,873	1,842,178	63,145	1,1[illegible]
Total, Equipment & General Services	$ [illegible]								

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRUNK HIGHWAY FUND
ACCOUNT DETAIL REPORT
JANUARY 31, 1992

	PRIOR YEARS				FISCAL YEAR 1992				
	6/30/91 ENCUMBRANCES	YEAR TO DATE EXPENDITURES	1/31/92 ENCUMBRANCES	CREDIT(CHARGE) TO FUND BAL.	APPROPRIATIONS	YEAR TO DATE EXPENDITURES	1/31/92 ENCUMBRANCES	UNENCUMBERED BALANCE	TOTAL EXPENDITURES
OTHER DEPARTMENTS									
Transportation Regulation Board	$ 10,802	$ 8,378	$ 882	$ 882	$ 730,000	$ 381,500	$ 347,881	$ 1,230	$ 380,887
Mississippi River Parkway Commission	5,279	5,279	0	0	32,000	14,131	0	17,869	19,410
Minnesota Safety Council	0	0	0	0	71,000	71,000	0	0	71,000
Travel Information Centers	29,865	22,800	2,471	1,824	728,000	390,707	338,834	2,858	413,307
Dept. of Public Safety	2,874,879	1,888,139	841,486	183,837	64,438,180	32,826,818	30,888,885	1,027,090	34,376,840
Dept. of Health-Emergency Med Svc	38,180	32,814	0	3,272	1,518,727	888,637	840,780	74,382	891,671
Dept. of Educ.-Traffic Project	4,186	4,186	0	0	21,000	8,182	13,340	1,400	10,347
Total, Other Departments	$ 2,960,888	$ 1,924,482	$ 844,839	$ 189,815	$ 67,538,918	$ 34,587,678	$ 31,388,887	$ 1,024,220	$ 38,212,171
CAPITAL IMPROVEMENTS									
Capital Improvements	$ 0	0	0	0	9,862,298	343,847	888,887	8,328,235	343,847
Total, Capital Improvements	$ 0	0	0	0	9,862,298	343,847	888,887	8,328,235	343,847
BUILDINGS									
Buildings	$ 0	$ 0	$ 0	$ 0	$ 8,874,000	$ 3,238,802	$ 1,618,860	$ 5,018,338	$ 3,238,802
Total, Buildings	$ 0	$ 0	$ 0	$ 0	$ 8,874,000	$ 3,238,802	$ 1,618,860	$ 5,018,338	$ 3,238,802
TOTAL	$ 388,817,298	$ 288,042,824	$ 148,823,384	$ 3,881,228	$ 887,754,844	$ 348,070,139	$ 298,167,982	$ 272,488,122	$ 472,712,764
REIMBURSEMENTS FROM OTHER FUNDS									
From General Fund	$ 0	$ 0	$ 0	$ 0	$ (1,306,000)	$ (1,306,000)	$ 0	$ 0	$ (1,306,000)
From Highway Users Tax Fund	0	0	0	0	(437,000)	(437,000)	0	0	(437,000)
Total Reimbursements	$ 0	$ 0	$ 0	$ 0	$ (1,743,000)	$ (1,743,000)	$ 0	$ 0	$ (1,743,000)
OPERATING TRANSFERS									
To Debt Service	$ 0	$ 0	$ 0	0	$ 13,747,000	$ 13,987,288	$ 0	$ (240,288)	$ 13,987,288
Total Operating Transfers	$ 0	$ 0	$ 0	0	$ 13,747,000	$ 13,987,288	$ 0	$ (240,288)	$ 13,987,288
GRAND TOTAL	$ 388,817,298	$ 288,042,824	$ 148,823,384	$ 3,881,228	$ 819,758,244	$ 288,324,918	$ 298,187,982	$ 272,235,734	$ 484,987,142

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE AIRPORTS FUND
SCHEDULE OF HANGAR REVOLVING ACCOUNT
JANUARY 31, 1982

ASSETS		
Loans Receivable		$ 2,442,447
Cash and Investments		753,022
Estimated Receipts	$ 425,200	
Less Receipts	(247,873)	
Balance		177,327
Total Assets		$ 3,372,796
ENCUMBRANCES, LOANS, AND ACCOUNT BALANCE		
Encumbrances:		
City of Wheaton	89,291	
City of Alexandria	104,000	
City of Two Harbors	118,165	
City of Bemidji	187,582	
City of Glencoe	122,112	
City of Chisholm-Hibbing	256,024	
Total Encumbrances		$ 873,204
Requisitions		0
Loans		2,442,447
Unencumbered Balance		57,145
Total Encumbrances, Loans, and Account Balances		$ 3,372,796

CHANGES IN LOANS RECEIVABLE ACCOUNT
AS OF JANUARY 31, 1982

Loans Receivable - July 1, 1981		$ 2,478,442
Add New Loans	$ 211,878	
Loan Repayments	(247,873)	
Net Change in Loans Receivable		(35,995)
Loans Receivable - January 31, 1982		$ 2,442,447

Date Prepared: 12-Feb-82

Date Prepared: 12-Feb-82

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE AIRPORTS FUND
BALANCE SHEET
JANUARY 31, 1982

RESOURCES			
Cash & Investments			$ 22,767,718
Loans Receivable			2,442,447
Accounts Receivable			29,388
Estimated Revenue		$ 15,401,000	
Less: Revenue	$(12,670,488)		
Revenue more than Forecast	232,388	12,438,100	
Balance			2,962,900
Total Resources			$ 28,198,051
LIABILITIES, APPROPRIATIONS, AND FUND BALANCE			
Liabilities:			
Warrants Payable			$ 1,988
Appropriations		$ 18,285,986	
Less: Expenditures	$ (6,377,509)		
Encumbrances	(6,511,600)	(12,889,109)	
Unencumbered Balance			6,178,896
Fund Balance			
Reserve for Encumbrances for Current Year		$ 6,511,600	
Reserve for Encumbrances for Prior Years		5,858,052	
Reserve for Hangar Revolving		3,185,000	
Unreserved Fund Balance		6,460,400	
Total Fund Balance			22,015,052
Total Liabilities, Appropriations, and Fund Balance			$ 28,198,051

STATE AIRPORTS FUND
COMPARATIVE STATEMENT OF REVENUE AND EXPENDITURES
JANUARY 31, 1992

	CURRENT YEAR FY 1992				PRIOR YEAR FY 1991		CURRENT YEAR FY 1992	
	JANUARY		YEAR TO DATE					
	ESTIMATED	ACTUAL	ESTIMATED	ACTUAL	YTD ACTUAL	TOTAL YEAR ACTUAL	YTD ACTUAL + REMAINING BUDGET	TOTAL YEAR BUDGET
BEGINNING BALANCES								
Cash and Investments		17,824,404		$ 20,587,788				
Loans Receivable		2,479,478		2,478,442				
Accrued Aircraft Registration		0		322,181				
Accrued Investment Income		0		131,817				
Warrants Payable		(471,488)		(1,532)				
Accounts Payable		0		(1,780,820)				
TOTAL BEGINNING BALANCES		$ 19,832,488		$ 21,718,487				
ADD REVENUE								
Aviation Fuel Tax	$ 225,000	$ 388,481	$ 1,748,300	$ 1,783,284	$ 1,640,800	$ 3,038,043	$ 3,244,984	$ 3,200,000
Airline Flight Property Tax	5,834,200	5,884,811	8,118,200	7,848,481	1,082,400	7,627,002	8,032,201	8,200,000
Aircraft Registration	12,000	6,175	1,246,000	1,280,425	989,043	2,002,201	1,835,425	1,800,000
Investment Income	100,000	87,284	740,000	715,138	740,771	1,614,862	1,175,138	1,200,000
Other Income	6,000	80	83,000	680,000	21,958	87,288	588,000	101,000
Transportation Services (A/R)	75,000	38,102	525,000	373,163	433,248	869,822	748,163	880,000
TOTAL REVENUE	$ 6,353,000	$ 6,372,163	$ 12,498,100	$ 12,070,489	$ 4,788,218	$ 15,029,178	$ 15,833,000	$ 15,401,000
LESS EXPENDITURES								
Operations	$ 320,000	$ 307,311	$ 2,250,000	$ 2,116,137	$ 1,833,109	$ 3,795,832	$ 3,725,137	$ 3,800,000
Airport Development & Assistance	860,000	758,312	6,380,000	6,709,431	4,378,162	8,007,384	11,359,431	11,040,000
Air Transportation Services	80,000	38,087	640,000	385,322	471,388	898,212	725,322	986,800
TOTAL EXPENDITURES	$ 1,330,000	$ 1,108,528	$ 9,180,000	$ 9,108,890	$ 6,777,650	$ 12,698,378	$ 15,809,890	$ 15,808,800
ENDING BALANCES								
Cash and Investments		$ 22,757,718		$ 22,757,718				
Loans Receivable (Adj.)		2,442,447		2,442,447				
Warrants Payable		(1,080)		(1,080)				
TOTAL ENDING BALANCES		$ 25,199,086		$ 25,199,086				

Date Prepared: 12-Feb-92

Date Prepared: 12-Feb-92

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE AIRPORTS FUND
ANALYSIS OF CHANGES IN FUND BALANCE
JANUARY 31, 1992

Unreserved Fund Balance - July 1, 1991		$ 9,187,108
Estimated Revenue		
Aviation Fuel Tax	$ 3,200,000	
Airline Flight Property Tax	8,200,000	
Aircraft Registration	1,800,000	
Investment Income	1,200,000	
Other Income	101,800	
Transportation Services (A/R)	900,000	
Total Estimated Revenue	$ 15,401,800	
Appropriations and Other Financing Uses		
Operations	4,101,581	
Airport Development & Assistance	12,437,000	
Air Transportation Services	1,847,308	
Total Appropriations	18,285,889	
Reimbursements (From)/To Other Funds	0	
Total Appropriations and Other Uses	$ 18,285,889	
Appropriations and Other Uses in Excess of Estimated Revenue		(2,884,089)
Other Changes in Unreserved Fund Balance		
Revenue more than Forecast	$ 232,368	
Reserve for Encumbrances for Prior Years Cancelled	115,080	
Decrease in Accounts Receivable	(225,748)	
Change in Reserve for Appropriation Carry Forward	204,308	
Total Other Changes in Unreserved Fund Balance		326,008
Unreserved Fund Balance - January 31, 1992		$ 6,649,408

STATE AIRPORTS FUND
ACCOUNT DETAIL REPORT
JANUARY 21, 1982

	PRIOR YEARS				FISCAL YEAR 1982				
	6/30/81 ENCUMBRANCES	YEAR TO DATE EXPENDITURES	1/21/82 ENCUMBRANCES	CREDIT(CHARGE) TO FUND BAL.	APPROPRIATIONS	YEAR TO DATE EXPENDITURES	1/21/82 ENCUMBRANCES	UNENCUMBERED BALANCE	TOTAL EXPENDITURES
OPERATIONS									
10100:01 Metro Airport Advisory Council	$ 0	$ 0	$ 0	$ 0	$ 15,000	$ 8,838	$ 0	$ 6,161	$ 8,838
13300:32 Aviation Fuel Tax Refunds	0	0	0	0	600,000	102,378	497,622	0	102,378
70000:00 Statewide Indirect Costs	0	0	0	0	50,000	25,000	25,000	0	25,000
71000:00 Data Processing Equipment	0	0	0	0	50,000	37,741	12,259	0	37,741
70420:01 Equipment	0	0	0	0	58,000	14,818	10,821	32,361	14,818
71000:03 Space Rental	0	0	0	0	90,000	19,835	70,165	0	19,835
71100:07 Aeronautics Operations	58,964	45,692	7,884	5,388	3,274,581	1,771,988	1,484,164	18,431	1,817,678
71100:09 Aviation Deposits	0	0	0	0	44,000	7,750	36,250	0	7,750
Total, Operations	$ 58,964	$ 45,692	$ 7,884	$ 5,388	$ 4,181,581	$ 2,069,567	$ 2,065,871	$ 58,153	$ 2,116,137
AIRPORT DEVELOPMENT & ASSISTANCE									
71100:02 Airport Develop. & Assistance	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
71100:03 Airport Construction Grants	4,795,829	2,583,322	2,123,421	89,286	7,200,000	1,821,838	1,629,131	3,748,831	4,605,280
71100:04 Airport Maintenance Grants	238,829	204,997	19,836	14,703	2,100,000	485,853	1,500,414	113,733	690,850
71100:08 Navigational Aids	1,664,848	576,463	1,077,802	583	2,378,000	738,484	998,072	642,444	1,314,937
71100:10 Pine Creek Airport	0	0	0	0	260,000	1,516	8,484	250,000	1,516
71100:09 Air Service Grants	0	0	0	0	500,000	0	0	500,000	0
70000:04 Prior Year Certification	2,632,825	188,878	2,428,858	5,088	0	0	0	0	186,878
Total, Airport Devel. & Assistance	$ 9,332,480	$ 3,551,840	$ 5,651,118	$ 109,671	$ 12,437,000	$ 3,147,791	$ 4,034,101	$ 5,255,108	$ 6,708,431
TRANSPORTATION SERVICES									
70410:00 Buildings - 80 Appropriation	$ 0	$ 0	$ 0	$ 0	$ 400,000	$ 0	$ 0	$ 400,000	$ 0
70410:80 FY80 Capital Improvements	0	0	0	0	16,500	470	30	16,000	470
71100:00 Non-Charge Flight Costs	0	0	0	0	53,000	33,051	21,498	(1,549)	33,051
71100:00 Air Transportation Revolving	5,704	5,101	0	603	1,103,888	288,630	325,110	462,148	321,791
71100:13 Civil Air Patrol	0	0	0	0	65,000	0	65,000	0	0
Total, Transportation Services	$ 5,704	$ 5,101	$ 0	$ 603	$ 1,638,388	$ 322,151	$ 411,638	$ 876,599	$ 355,322
TOTAL APPROPRIATIONS	$ 9,397,124	$ 3,602,381	$ 5,658,003	$ 115,660	$ 18,256,969	$ 5,539,509	$ 6,511,600	$ 6,189,860	$ 9,179,890

Date Prepared: 12-Feb-82

Date Prepared: 12-Feb-92

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION FUND
BALANCE SHEET
JANUARY 31, 1992

ASSETS			
Cash in Treasury			$ 8,247,404
Bonds Authorized - Unissued			11,935,000
Federal Aid Receivable			0
Federal Aid Agreements			380,537
Federal Aid Programmed		$ 230,453,682	
Less Agreements Executed		(200,458,587)	
Balance			29,995,095
Total Assets			$ 50,558,036
LIABILITIES, APPROPRIATIONS, AND FUND BALANCE			
Warrants Payable			$ 0
Advance from Other Governmental Agencies			81,698
Appropriations		$ 54,338,828	
Less: Expenditures	$ (3,881,301)		
Encumbrances	(12,404,287)	(16,285,588)	
Unencumbered Balance			38,053,240
Fund Balance			
Reserve for Encumbrance			12,404,287
Unreserved Fund Balance			18,812
Total Liabilities, Appropriations, and Fund Balance			$ 50,558,036

MINNESOTA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION FUND
ACCOUNT DETAIL REPORT
JANUARY 31, 1982

	TOTAL PROJECT AUTHORIZATION	PRIOR YEAR EXPENDITURES	CURRENT YEAR AUTHORIZATIONS	CURRENT YEAR EXPENDITURES	ENCUMBRANCES	UNENCUMBERED BALANCE
70000.84 Interstate Substitution - '84						
County & Township	2,409,584	2,406,254	3,330	0	0	3,330
Municipal	1,332,206	1,326,604	5,602	0	0	5,602
70000.85 Interstate Substitution - '85	236,000	0	236,000	0	0	236,000
County	425,000	50,689	374,311	0	107,729	266,582
City	825,000	604,119	220,881	0	58,636	162,245
U of M Transitway	760,000	0	760,000	0	714,302	45,698
70000.87 Local Road & Bridge Repl-'87						
Demo Projects - Indian Reservations	25,000	0	25,000	0	13,001	11,999
County	4,680,180	1,898,820	2,882,000	780,380	1,800,085	182,844
City	477,884	166,940	310,986	0	310,985	1
County - Fed. Demo	2,213,754	444,754	1,769,000	0	1,315,017	453,983
City - Fed. Demo	760,000	685,826	74,174	0	64,790	9,384
State Match - TH Projects	891,220	481,373	409,847	320,314	4,400	85,133
70000.80 Bridge Const. '80 Bonds						
County	4,750,000	2,181,918	2,568,482	1,186,087	1,187,916	192,000
Township	2,100,000	1,480,818	619,182	274,879	242,746	101,881
Municipal	1,180,000	0	1,180,000	217,385	83,401	879,214
70000.80 Federal Aid Demo - '80 Bonds						
County	6,425,000	0	6,425,000	0	3,152,717	3,272,283
Indian Reservation	175,000	0	175,000	0	0	175,000
70010.80 Local Bridges '80 Bonds						
County	3,304,000	0	3,304,000	744,530	1,876,307	683,163
City	794,000	41,666	752,334	0	410,273	342,061
Township	1,812,000	0	1,812,000	92,406	974,175	745,419
71000.10 Transportation Fund Dedicated Receipts	0	0	0	0	0	0
71000.10 Local Bridge Construction						
County	147,960	58,893	89,067	0	0	89,067
71000.20 Bridge Constr. & Reconstr. - 1979						
County	12,030,374	11,840,360	190,014	58,914	119,100	12,000
Municipal	1,900,000	1,807,198	92,802	84,802	8,000	0
Township	21,169,602	21,060,295	109,307	85,978	14,783	8,546
Federal Grant Matching	19,882,085	19,534,035	348,050	21,480	318,705	7,865
70000.21 Bridge Constr. & Reconstr. - Eng./Env.						
Engr/Envir Studies - Cnty & Twnshp	888,171	883,964	4,207	0	4,207	0
Engr/Envir Studies - Municipal	165,548	20,813	144,735	0	144,735	0
71000.30 Highways & Bridges - 1981 Bonds						
Interstate (48)	30,030,584	0	30,030,584	0	0	30,030,584
Trunk Highway Bridges	13,735,494	13,701,801	34,813	0	88	34,725
Interstate Highways	48,403,321	48,384,013	19,308	0	3,377	15,931
Interstate R/W	125,484,546	124,645,686	838,860	0	355,781	483,079
70000.80 Interstate Substitution - 1981 Bonds	42,010,042	42,010,042	0	0	0	0
70000.90 Prior Year Certified Encumbrance	2,482,064	2,381,238	100,826	0	100,442	384
	220,213	34,977	185,236	0	165,460	19,776
Total	$ 380,452,411	$ 296,141,601	$ 84,310,810	$ 3,881,301	$ 12,494,267	$ 38,853,248

Date Prepared: 12-Feb-82

MINNESOTA DEPARTMENT OF TRANSPORTATION
OTHER FUNDS
ACCOUNT DETAIL REPORT
JANUARY 31, 1982

		PRIOR YEARS				FISCAL YEAR 1982				
		6/30/81 ENCUMBRANCES	YEAR TO DATE EXPENDITURES	1/31/82 ENCUMBRANCES	CREDIT(CHARGE) TO FUND BAL.	APPROPRIATIONS	YEAR TO DATE EXPENDITURES	1/31/82 ENCUMBRANCES	UNENCUMBERED BALANCE	TOTAL EXPENDITURES
TRANSIT APPROPRIATIONS										
71000:20-10	Transit Improvement Admin	$ 18,374	$ 12,818	$ 0	$ 8,558	$ 410,000	$ 207,100	$ 200,419	$ 2,481	$ 219,918
71000:45-10	Non-Metro Assistance	588,430	548,731	14,482	37,218	7,964,000	6,154,210	1,218,181	591,609	6,702,941
71000:12-30	MTA Capital Purchases	287,538	208,208	58,829	1,439	527,000	320,181	0	206,819	528,389
71000:14-30	MTA Section 18	781,081	458,847	188,088	138,179	2,255,747	382,455	1,303,481	568,811	839,302
71000:18-30	Rideshare - Federal	845,825	414,388	14,278	218,959	440,008	130,073	152,208	157,728	544,481
72700:16-30	UMTA Section 8 Planning	185,758	25,517	2,361	77,891	148,000	19,088	60,912	68,000	44,605
70000:84-34	Prior Year Certification	138,884	4,023	135,848	(105)	0	0	0	0	4,023
71000:08-34	Transit Assist Greater Mn	878,128	542,788	318,788	9,588	0	0	0	0	542,788
71041:80-34	Light Rail Transit	2,468,027	1,827,836	828,881	8	0	0	0	0	1,827,836
71000:04-01	Elderly Transit -Local	60,175	67,815	0	380	165,000	80,102	0	84,898	147,917
	Total Transit	$ 5,852,818	$ 3,885,100	$ 1,560,810	$ 487,082	$ 11,881,816	$ 7,283,128	$ 2,827,271	$ 1,771,418	$ 11,198,238
RAIL APPROPRIATIONS										
71000:21-10	Planning and Programming	$ 8,608	6,580	$ 0	$ 48	$ 283,000	$ 130,441	$ 133,888	$ (1,410)	$ 137,001
71000:10-20	Improvement Account	2,877,248	1,481,820	277,473	817,847	8,423,008	248,275	3,188,078	5,077,084	1,728,103
71000:20-20	Rail Bank Maintenance	0	0	0	0	60,000	0	0	60,000	0
71000:22-20	Railroad Crossing Study	0	0	0	0	80,000	0	42,280	17,760	0
71000:23-20	Railroad Crossing Inventory	0	0	0	0	50,000	0	48,800	2,000	0
71000:24-20	Railroad Education	0	0	0	0	20,000	0	0	20,000	0
70000:05-20	Federal/Local Projects	8,854,827	0	0	8,054,827	12,000,000	1,478,587	8,162,488	4,337,884	1,478,587
71000:20-30	Rail Service Continuation	14,708	1,684	0	13,008	138,177	25,883	23,407	77,677	28,787
	Total Rail	$ 11,753,381	$ 1,480,882	$ 277,473	$ 8,888,828	$ 22,002,185	$ 1,881,376	$ 8,838,774	$ 10,481,805	$ 3,371,488
AERONAUTICS APPROPRIATIONS										
71100:80-10	License Deposits	$ 0	$ 0	$ 0	$ 0	$ 1,000	$ 20	$ 888	$ 0	$ 20
71100:10-20	Weather Observation	11,424	6,247	3,000	2,108	21,000	1,566	110	18,316	7,813
71100:12-20	Federal Airports	18,458,348	8,885,420	8,818,886	885,272	30,000,000	5,774,488	12,180,788	12,031,748	15,858,888
71100:80-30	Pavement Mgmt Planning	17,578	14,262	3,317	1	0	0	0	0	14,262
71101:80-30	Airport Inspection Program	45,882	18,363	0	25,728	88,604	0	20,000	68,604	18,363
71901:80-30	Air Traffic Control Training	0	0	0	0	3,250,000	1,435,000	1,818,880	0	1,435,000
71100:85-60	Gift Acceptance	0	0	0	0	2,750	0	0	2,750	0
	Total Aeronautics	$ 18,533,424	$ 8,926,272	$ 8,824,881	$ 583,171	$ 33,381,354	$ 7,211,062	$ 14,029,888	$ 12,120,418	$ 17,138,384

MINNESOTA DEPARTMENT OF TRANSPORTATION
OTHER FUNDS
ACCOUNT DETAIL REPORT
JANUARY 31, 1992

		PRIOR YEARS				FISCAL YEAR 1992				
MISCELLANEOUS APPROPRIATIONS		6/30/91 ENCUMBRANCES	YEAR TO DATE EXPENDITURES	1/31/92 ENCUMBRANCES	CREDIT(CHARGE) TO FUND BAL.	APPROPRIATIONS	YEAR TO DATE EXPENDITURES	1/31/92 ENCUMBRANCES	UNENCUMBERED BALANCE	TOTAL EXPENDITURES
70420:01-10	Equipment Appropriation	$ 52	$ 0	$ 0	$ 52	$ 5,000	$ 1,071	$ 3,929	$ 0	$ 1,071
70600:00-10	Grant River Road	700,000	500,000	200,000	0	0	0	0	0	500,000
71000:03-10	Space Rental	0	0	0	0	43,000	0	43,000	0	0
71000:00-10	Computer Tech. Retraining	8,000	8,000	0	0	0	0	0	0	8,000
72000:04-10	Bike Coord & Advis.	5,314	4,258	0	1,056	0	0	0	0	4,258
71000:01-17	Traffic Signal Retiming	0	0	0	0	1,175,000	0	329,402	845,518	0
71100:01-17	Waste Crumb Tire Rubber	0	0	0	0	160,000	0	45,715	114,285	0
71101:40-20	Conference/Seminar Expense	0	0	0	0	13,500	3,012	360	10,138	3,012
72000:02-20	Bike Coord. & Advis. Comm.	0	0	0	0	80,000	26,320	43,567	10,113	26,320
70610:87-30	Junkyard Control	0	0	0	0	384,932	8,158	17,841	338,932	8,158
71000:01-30	Goldwater Project - 1990	0	0	0	0	1,000,000	224,311	148,611	628,078	224,311
71000:02-30	Goldwater - 1992	0	0	0	0	6,000,000	0	300,000	4,700,000	
71004:00-30	Motor Carrier Safety	72,500	(13,081)	0	85,850	587,200	220,483	282,737	56,000	218,402
72700:31-30	Section 112 Planning	303,310	220,079	131,305	21,827	1,187,000	97,715	1,089,231	54	227,803
70632:00-00	County Road & Bridge	82,000,405	0	0	82,000,405	141,061,043	34,867,703	74,890,057	31,803,223	34,867,703
70600:01-33	Junkyard Regulation	929,305	253,692	1,000,128	(414,405)	200,000	30,225	31,000	128,117	282,917
72000:00-00	Bicycle Trail Impr.-State	0	0	0	0	25,733	0	14,991	10,742	0
72000:10-00	Bicycle Trails-State	0	0	0	0	10,217	0	2,479	7,738	0
72000:11-00	Bicycle Trails-Local Grants	0	0	0	0	19,782	0	0	19,782	0
	Total Miscellaneous	$ 85,847,701	$ 888,623	$ 1,471,823	$ 82,502,785	$ 161,082,377	$ 35,617,830	$ 77,290,047	$ 38,771,001	$ 36,000,572
	TOTAL OTHER APPROPRIATIONS	$ 101,280,540	$ 16,283,886	$ 11,333,788	$ 73,840,884	$ 218,037,732	$ 52,082,888	$103,889,878	$ 63,144,558	$ 68,308,602

Date Prepared: 12-Feb-92

TOTAL P.21

TELECOPY

6 pages

To Ms. Chris Steinman, c/o Deloitte & Touche
fax number 202-638-7844.
phone number 202-879-4987

From Mark Kraichy, NYSDOT
phone number 518-457-6700

March 12, 1992

This is regarding a questionnaire from Richard Taylor, Massachusetts Executive Office of Transportation and Construction. The following is are responses to each of the 13 questions. If there are additional questions, I may not be able to provide answers today.

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1. Completed 3/12/92 by Mark E. Kraichy, Program Research Analyst IV, Policy Development Group, New York State Department of Transportation, (518)-457-6700.

2. will depend on initial interview.

3. In 1988 a $3 billion state bond issue was approved, (after a successful $1.25 billion 1983 bond issue) to finance much of the highway capital program. However by the end of the next state fiscal year (April, 1993) most of the bond funds will have been committed to projects. Fortunately, a new state dedicated fund will begin which will provide state monies for highway construction.

   For this upcoming fiscal year (April, 1992 to April, 1993) we project a highway capital program of $1.7 billion which will be supported 50% with federal aid; 27% from state bonds; and 23% from regular state appropriations. Of this program 70% represents construction contracts; the balance is for engineering services and for purchase of right-of-way. By comparison, the total appropriations for operations being requested for the upcoming fiscal year for highway maintenance is $190 million. This does not include other costs for categories such as administration, traffic and safety, equipment management, nor waterways operation and maintenance.

4. Although the funding does not satisfy unconstrained needs, it is projected to be adequate to maintain current conditions (levels of deficiency). There are numerous assumptions that this judgement is based on; if they do not hold true then neither will the conclusion.

5. Funding appears to be adequate for capital costs; but operating costs are financed from general state revenues which are much more difficult to project, in either amount or the level available for highway operating costs.

6. For New York State, the primary new funding source, is a dedicated fund. The fund does not go into effect until April, 1993. The fund will consist of a surcharge on motor vehicle registrations, a highway use tax (charged to large trucks), a portion of the state's gasoline excise tax, and a large portion of a tax that was substantially imposed in 1990 and 1991 which is called a petroleum business tax. For the petroleum business tax, part of it is to be used for highways and part for mass transit. The exact split is currently being negotiated with the state legislature.

7. A portion of the gas tax (about 1 cent) is used to pay the debt service on bonds which are issued by the New York State Thruway Authority. These bonds have been relied upon to finance critical projects at times when the overall state's fiscal situation wouldn't otherwise permit the projects to be advanced. This financing mechanism has been used since 1972, for a program which was called Emergency Reconditioning and Preservation.

8. Specifics on deciding when and how much debt to issue are decided upon by the Office of the State Comptroller. Generally speaking, debt is not issued until the actual cash is needed to finance a project obligation.

9. Innovative financing techniques are usually considered at our regional levels during project development. For example, when someone advocates a project if regular resources are not available, thought is given to other methods to secure funding.

10. In January of 1991, the Department published a handbook on Public-Private Financing of Road Improvements. This publication suggests that the most appropriate techniques for private financing of road improvements are:
    - a.) creation of Transportation Development Districts;
    - b.) Imposition of Impact Fees;
    - c.) Tax Increment Financing; or
    - d.) Donation of Right-of-Way.

    Attached is a copy of the section of the handbook discussing these techniques. The full handbook is available on request, as are a detailed discussion of four case studies. Please call (518) 457-8331 if you would like a copy.

Michelle [illegible]

11. To the extent possible and appropriate, transportation policy is always approached from an intermodal

perspective. For example, in the creation of a dedicated fund for highway capital construction last year, a dedicated fund for mass transit was also created.

12. All revenues sources, to the extent possible, are used to finance transportation projects. For example, federal aid projects on the New York State Thruway, when eligible have always been supported by toll revenues. The extended application of federal aid to use funds on toll facilities, as permitted by section 1012 of the Intermodal Surface Transportation Efficiency Act of 1991 is most welcome.

13. When an area is identified, and if appropriate and feasible, yes, we have made efforts to integrate functions of other operating entities into our own. A good example is in the early 1980's when the Department took over the functions of the Jones Beach State Parkway Authority which controlled approximately 500 lane-miles of parkway on Long Island. The Department also integrated about 800 lane-miles of Westchester County Parkways into the Department's operation. When this occurred, the legislature enacted special legislation, and created a Special Parkway Rehabilitation Fund, which provided to assure there would be adequate funding to achieve the required roadway repairs. This fund was a combination of federal money, state aid, and certain toll revenues which continued to be collected at certain points on the Parkway system.

    Last year the Department tried to combine certain of its own highway maintenance residencies as a cost-saving measure. On April 1 of this year out of 65 residencies, 10 residencies will be combined to 5, so that there will only be a total of 60 residencies in the state. This change is solely an integration of administrative / management functions. (A residency is the lowest organization unit within the Department and is responsible for highway maintenance functions over a small geographic area, roughly the size of a county. There are a total of 62 counties in New York State.)

IV. FINANCING MECHANISMS

There are several innovative financing methods that localities have the option to use to raise a local share of a project's cost. Although not all-inclusive, these methods are suggested to be the most appropriate for use in New York State.

A. TRANSPORTATION DEVELOPMENT DISTRICTS

Transportation Development Districts (TDDs) are an application of the traditional special assessment district practice to the financing of transportation improvements. Special assessment districts are designed to charge owners of property who benefit from public improvements for the costs associated with constructing and maintaining the improvements.

New York State currently does not have any blanket or statewide enabling legislation allowing localities to set up TDDs. Creation of each district now requires its own individual statute to allow the local government to create or extend a transportation development district. The enabling legislation used for individual districts in New York State has allowed flexibility in the types of assessment mechanisms used. The governor, with the support of the department, is seeking broad enabling legislation for TDDs to facilitate the creation of such districts by local government and to encourage consistency.

When the TDD is in operation, the receipts of the special assessment are placed in a special fund which may be used for construction. The funds can be used to retire bonds that were used in financing improvements. The TDD can issue bonds and then can use the stream of assessment to pay interest and principal.

Permission of the State Comptroller is required to create or extend a special district which allows long-term indebtedness by the local government.

The boundaries of the district are designated reflecting the area in which property owners will benefit from the improvements. Within the district, a charge is levied either on a one-time basis or, more commonly, as a series of charges over the life span of the district at intervals determined by the enabling legislation. These are often annual charges due at the same time as local property taxes.

Benefits can be assessed by the TDD based on front footage or area of the property within a defined distance from the transportation improvement, property value, or the increase in property value attributable to the transportation improvements or other method rationally related to the improvement.

TDDs facilitate mutual funding arrangements between localities and the State and between different levels of local government and with private developers. Involvement of Metropolitan Planning Organizations (MPO) ensure that various transportation plans are compatible and mutually supportive in urbanized areas.

The NYSDOT regional offices, Main Office Economic Development Group, or local MPO staff are available to provide technical assistance to localities on creation of and operation of TDDs.

B. IMPACT FEES

An impact fee is a one time fee the municipality imposes upon a developer to compensate for the cost of the impact of the development upon the public facilities in the community.

Impact fees are almost always used for the dual purpose of financing capital improvements and controlling growth. Impact fees need to be structured with care so that growth is controlled but not prohibited. The fee rates must be reasonable in such a way that they cannot be challenged as taking property without due process of law.

Acceptance of impact fees by developers and communities, in general, is entirely related to perceptions of equity. The fees must have *"rational nexus"* with the impacts of the project. There are important legal and structural issues that must be considered in implementing impact fees. The passage of clearer enabling legislation could go a long way towards improving the viability of impact fees as a source of innovative public/ private financing. A major question regarding impact fees is the basis of the fee itself. The fee must reflect equitably the actual impact of a development on the conditions of a transportation facility. Thus, two equally assessed uses generating different traffic volumes will not be charged the same *"fee"* for the cost of transportation improvements.

Common examples of bases for impact fee assessment are the occupied square footage of a development, the daily peak hour trips generated by the individual development, the number of employees, or the number of parking spaces necessitated by the development.

The Town of Hudson, New Hampshire, has used the number of vehicle trips generated during the daily peak hour which can be attributed to the development as a measurement of impact to determine fee scales. The cost allocation procedure for that town's impact fee is outlined in a detailed manner in an article found in the December 1986 issue of the ITE Journal, *"A Procedure for Allocating Road Improvement Costs to Private Developers."*[3]

C. TAX INCREMENT FINANCING

Tax Increment Financing (TIF) is a funding mechanism that has traditionally been used in connection with community development efforts. While these have often included improvements in transportation facilities, the focus has been mainly on community economic revitalization. Some states have begun to make use of TIF in public/private efforts directly connected to state transportation programs.

Tax increments are a funding basis for bond issues to finance transportation improvements. The adequacy of the income flow depends upon increased land value, which of course, may not take place. Thus, tax increment bonds, depending upon a single tax source, may not be as secure

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[3] Raymond Niedowski, William J. Roeche, Ruth Bonsignore and Robert A. Perreault Jr., "A Procedure For Allocating Road Improvements Costs to Private Developers." ITE Journal, December 1986, pp. 35-30.

as full faith and credit bonds. Enabling legislation to allow this kind of bond issue for certain kinds of TIF districts has been passed in New York State.

A district or zone that is targeted for public and/or private investment in the project area has its taxable values frozen at a base year (pre-investment) value of real property and improvements. Tax receipts produced by the incremental increase in property valuation for the zone above the base year, resulting from the increased investment within the zone, are deposited in a development trust fund for use in the zone.

The Iowa *"RISE"* transportation program has been used in connection with a TIF district implemented at the local level in the City of Davenport, Iowa, for the construction of an interchange between East 53rd Street and Interstate 74. In the case of Davenport, the developer promised to construct at least 30,000 square feet of office space adjacent to the interchange within a year of its completion. This investment is expected to leverage other private investment into the area resulting in a projected increase in assessed valuation of between $21 million and $59 million for the zone. This should result in incremental tax receipts of between $500,000 and $1.7 million in annual revenue within ten years of the completion of the interchange.

However, there is risk involved in using TIF. There is no guarantee of success. If new private investment is inadequate and the value of the land does not appreciate as much as expected, the incremental tax receipts will not be realized and the financing of projects could be jeopardized.

D. RIGHT OF WAY DONATIONS

In many situations, a local or private donation of right-of-way can be used to offset all or part of the local portion of a project cost. This can be especially beneficial if the project is not needed for some time and there is a chance that encroaching development will reduce the likelihood of acquiring the land later at a reasonable cost. It is also a form of land banking which will ensure that the property will be available when needed.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRU

Transportation Issues Survey

II. Background Information

1.

Date	3/10/92
Name	James F. Marshall
Position	Director, Public Works and Transportation
State/Organization	New Hampshire Dept.of Transportation
Phone Number	(603) 271-3734

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	*Position*	*Phone Numbe*
Christopher Morgan	Public Transportation Administrator	271-2564

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicat as a percentage of total the amount allocated for construction and operations & maintenar

FY 90:

Federal	31.2%
Local	51.4%
Fare rev.	14.0%
Other	3.4%
State	0.0%

(urban and rural transit operations)

Local funds include a contribution in lieu of fares by the University of N.H. to or urban system, private donations, United Way, etc. as well as local revenues.

4. How adequate are these sources?

These sources are not adequate to meet current operating needs, and are unable to provide for needed capital improvements.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Federal operating assistance has not increased with operating costs; local assistance has increased, but has been unable to meet increasing costs. Additional demands in rural areas have not been met due to level funding.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

In New Hampshire, state assistance would be an innovative source. General funds face a shortfall, however, so it is necessary to look elsewhere. Cities have attempted unsuccessfully to change legislation setting aside parking revenues for parking facilities and open them to transit use. The state is considering use of state highway funds for transit, depending on an interpretation of the state constitution, which limits these funds to highway purposes.

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

Not at the state level

8. What criteria do you use in deciding when and how much debt to issue?

NA

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

Not at this time. If rail projects being considered (MBTA extensions) prove feasible, these could be considered for station facilities.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

Private involvement includes one system that contracts for operations; user side subsidy (taxi), etc. These have been successful on a limited scale.

IV. Coordinating Functions/Operations

11. To what degree have you approached transit policy from an "intermodal" perspecti
explain.

A limited degree. With no rail transit, intermodal opportunities are l
There is some integration of intercity and local bus, and intercity bus
carriers use park and ride facilities.

12. Do you "cross fund" projects with revenues generated from fares, fees, taxes etc.? F
identify instances and explain rationale.

Not at the state level.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

State does not have sufficient staffing to perform these functions. State purchases vehicles for rural systems, and for elderly/disabled operators.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

II. Background Information

1. Date	3/6/92
Name	Louis C. Schultz, Jr. CD
Position	Chief, Highway Program Development
State/Organization	Pennsylvania Department of Transportation
Phone Number	(717) 787-5246

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	*Position*	*Phone Number*
Joy Knorr	Chief, Financial Analysis	(717) 787-8554
Robert Baron	Planning Manager	(717) 787-5730
Robert Janecko	Chief, 12 Year Program	(717) 787-5248

III. Funding/Financing Techniques

3. With respect to highway funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

The primary highway funding sources for the Pennsylvania Dept. of Transportation include (state funds only):

Liquid Fuels Taxes	$1083.3 Million
Licenses and Fees	463.9 Million
Other Misc. Revenue	81.3 Million
Total	$1628.5 Million

The expenditure percentages are:

Construction	9.0%
Maintenance	37.7%
Administration & Safety	4.6%
Debt Service	12.0%
State Police and Other	36.7%

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

4. How adequate are these sources?

A tax package passed in August, 1991, provided adequate funds to match federal funding and maintain a responsible highway program.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Prior to the current economic slow down, revenues were growing at an annual rate of approximately 2% while expenditures were growing at an annual rate of about 4%.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

Because there is a limit on PennDOT's ability to maintain pace with transportation improvement needs, as well as to meet all of the transportation needs associated with development and expansion opportunities, PennDOT encourages public/private partnerships as an alternative financing strategy.

In addition, PennDOT is working with the Pennsylvania Turnpike Commission on a legislatively authorized program of major construction projects. These projects will be funded using a combination of turnpike tolls, state highway money, and federal funds. ✓

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

The Department has a dedicated revenue source (separate from the amount indicated in #3) for the rehabilitation and replacement of state and local bridges. Annual receipts total approximately $100 million dollars. When the program was initiated in 1982, it was envisioned that all revenues would be used for debt service within 4 or 5 years. With greater availability of federal and state funds, the amount used for debt service has been limited to about 30% of state revenue.

8. What criteria do you use in deciding when and how much debt to issue?

Except for the bridge program mentioned above, the Department has adopted a 'pay-as-you-go' strategy for highway construction. The only other exception is bonding for highway access to the Greater Pittsburgh Airport. This project complemented a major economic development venture from private investment, local funds and state bonds.

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc)? Please explain

PennDOT will continue to work with local governments and developers on projects funded as public/private partnerships. Among the innovative financing methods available to local officials are impact fees, tax increment financing, right-of-way donations, and formal transportation development districts. PennDOT will also continue to work with the PA Turnpike Commission on federal/state/toll financed projects of mutual interest. These initiatives are also noted in our response to question #6.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc)? Please elaborate - cite examples; were they successful?

Consultants are used for engineering studies, final design, construction inspection and construction management. PennDOT has contracted out various maintenance work, such as mowing, guiderail repair, snow removal, etc. PennDOT has implemented one bridge replacement project using turn key construction. We will be using this concept on additional projects (to a limited extent) in the future.

IV. Coordinating Functions/Operations

11. To what degree have you approached transportation policy from an "intermodal" perspective? Please explain.

Our Twelve Year Program process incorporates the programming of aviation, rail, transit, highway and bridge projects together. Projects recommended as part of the programming process that incorporate "intermodal" features such as park and ride lots, transfer stations etc. are given added priority for programming (if warranted) Moreover, PennDOT is working with other regional officials to implement the I-95 Intermodal Mobility Project. Over the next 20 years, PennDOT will completely rehabilitate the roadway and structures in this 51-mile long corridor, improve connections to aviation, rail, transit, and ports, expand carpool/vanpool, and shared-ride activities, as well as implement IVHS technologies.
Pennsylvania is committed to the transportation of goods, services, and people; not vehicles.

12. Do you "cross fund" projects with revenues generated from tolls, fees, taxes, etc.? Please identify instances and explain rationale.

Projects are "matched" from various sources - local funds, special projects with turnpike toll revenue, partnership projects with transportation authorities including private business. As an example, the Delaware River Joint Toll Bridge Commission maintains a number of toll-free bridges using revenues collected on toll bridges.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION

Transportation Issues Survey

13 Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc)? Please identify areas and impact.

PennDOT performs the following activities on a centralized, statewide basis: planning, fiscal management, capital budgeting, MIS, accounting, consultant selection, bid openings, engineering standards, research activities, materials testing, traffic sign manufacturing, driver licensing, motor vehicle registration, equipment purchases, accident records, and legal support. Eleven engineering district offices handle the design, construction, and maintenance of state highways.

All transit, aviation, rail, ports, and waterways activities are coordinated at the Central Office.

In addition, the Rural Technical Assistance Program (RTAP) is a techonology and transfer program for all municipalities, both rural and urban. The objective of RTAP is to translate information developed from the federal and state levels to the local government level. RTAP provides the following services: quarterly newsletter, distributing relevant publications, conducting workshops, and conducting on-site technical assistance.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

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II. Background Information

1. Date	March 16, 1992
Name	Richard R. Kelly
Position	Director, Interstate Transportation
State/Organization	The Port Authority of New York and New Jersey
Phone Number	(212) 435-7664

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	*Position*	*Phone Number*
Joanne Crowley	Manager	(212) 435-4125
Robert Isaacs	Manager	(212) 435-7747

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

With respect to all Port Authority programs and activities, including those related to transit, revenues are derived principally from the tolls, fares, landing and dockage fees, rentals and other charges for the use of, and privileges at, its various facilities.

Attached are several charts which show percentages on sources and uses of funds for the Authority.

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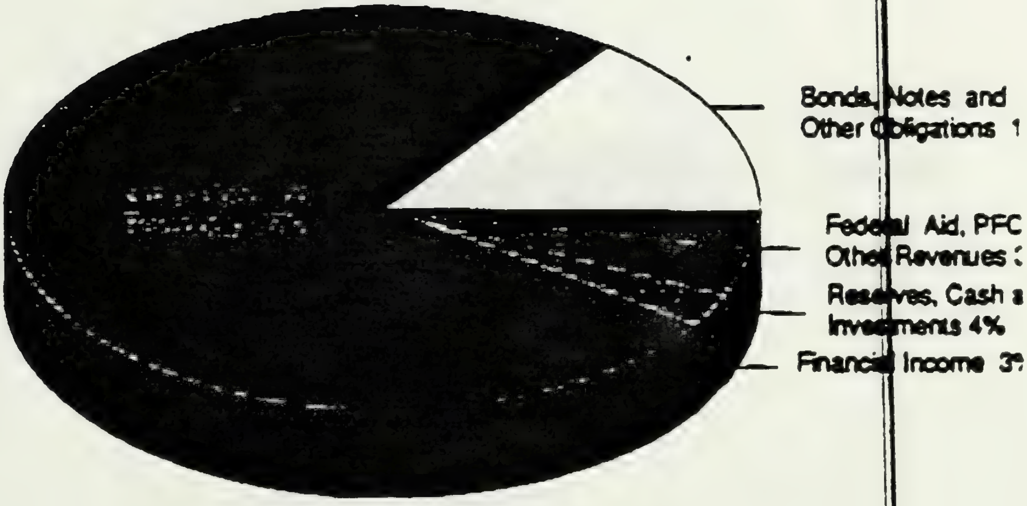
SOURCE OF FUNDS

(In Millions)

1992



	1992 Budget	1991 Estimate
Gross Operating Revenues	$2,015	$1,908
Bonds, Notes and Other Obligations	403	585
Financial Income (Capital and Operating)	82	92
Reserves, Cash and Investments	102	(194)
Federal Aid, Passenger Facility Charge and Other Revenues	75	36
Total	$2,677	$2,427

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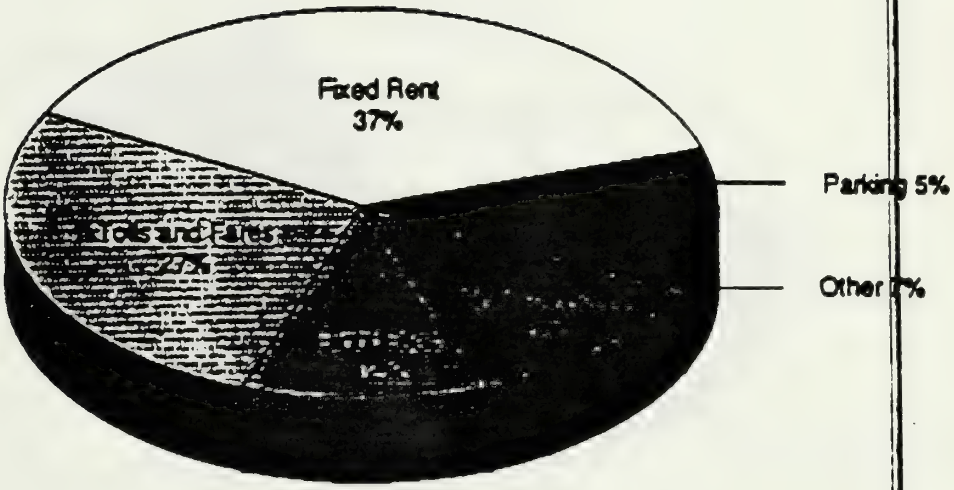
GROSS OPERATING REVENUES BY CATEGORY

(In Millions)

1992



CATEGORY	I T D	AVIATION	PORT	WT/ED	1992 Budget	1991 Estimate
Fixed Rent	$8	$319	$78	$347	$752	$707
Tolls and Fares	548	-	-	.	548	506
Flight Fees	-	231	-	.	231	224
Cost Recovery	14	154	6	72	246	242
Parking	3	85	3	7	98	92
Other	10	58	2	70	140	137
Total	$583	$847	$ 89	$496	$2,015	$1,908

USE OF FUNDS
(In Millions)

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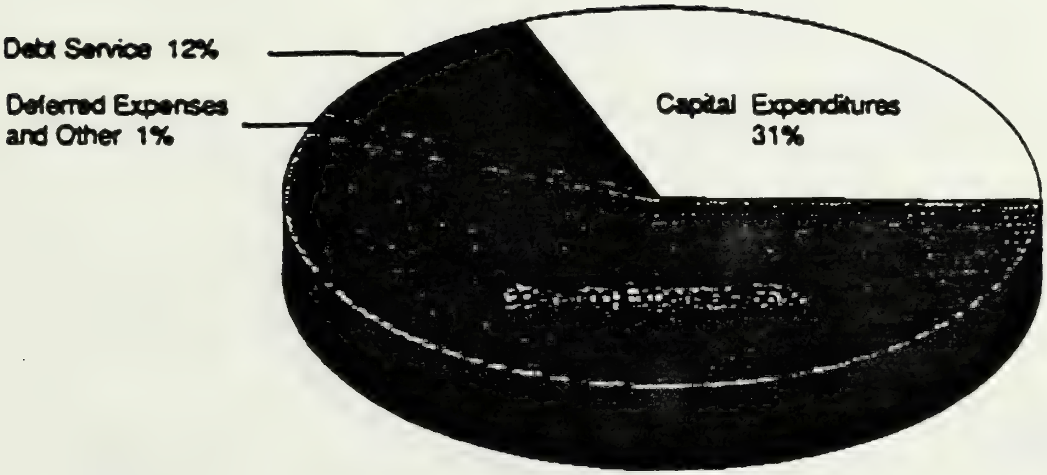
1992



	1992 Budget	1991 Estimat
Operating Expenses	$1,498	$1,446
Capital Expenditures	822	657
Debt Service (Net of Capitalized Interest)	326	284
Deferred Expenses and Other	31	40
Total Expenditures	$2,677	$2,427

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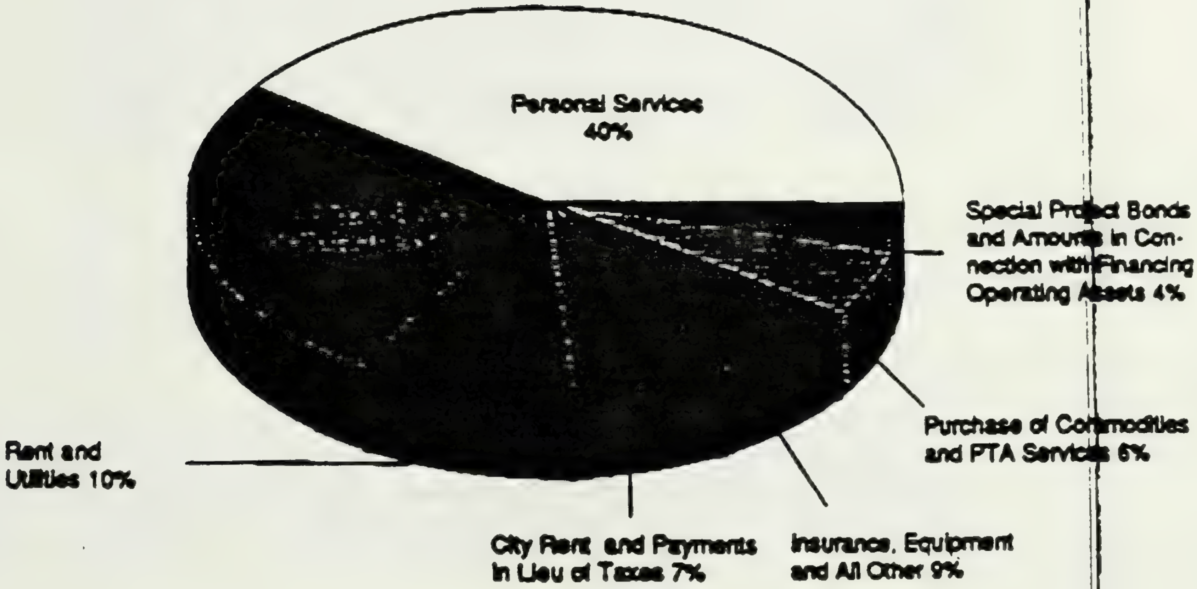
OPERATING EXPENSES

(In Millions)

1992



	1992 Budget	1991 Estimate
Personal Services *	$597	$568
Maintenance, Service and Contracts	357	331
Insurance, Equipment and All Other	146	156
Rent and Utilities	145	141
City Rent and Payments In Lieu of Taxes	106	112
Purchase of Commodities and PTA Services	87	79
Special Project Bonds and Amounts in Connection with Financing Operating Assets	60	59
Total	$1,498	$1,446

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* Includes Payroll Taxes, Health and Life Insurance and Retirement Contributions.

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4. How adequate are these sources?

For the Port Authority, as a whole, our "pooled revenues" are presently sufficient to cover the Agency's expenses, capital investment and debt service as more fully explained in both the Official Statement and our Annual Report. Certain facilities of the Port Authority, however, operate at a deficit or do not generate surplus revenue. It is expected that increases from time to time will continue to be necessary in Port Authority facility charges. The Interstate Transportation Department, which operates the Agency's tunnels and bridges, as well as the PATH rail rapid transit system and the Port Authority Bus Terminal does not generate sufficient revenues to cover its expenses. The Interstate Transportation Department deficit is funded by net revenues generated by other Port Authority departments and facilities.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Revenue growth for all Port Authority businesses including the Interstate Transportation Network, continues to be slow due to the recession. As a result, we have controlled expense growth throughout the Agency. For 1992, the growth in operating expenses has been held to only 3.6%, less than the region's rate of inflation.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

There are no new or unique funding sources being considered for our transit related facilities.

INTERSTATE TRANSPORTATION
Schedule of Net Income
(In Millions)

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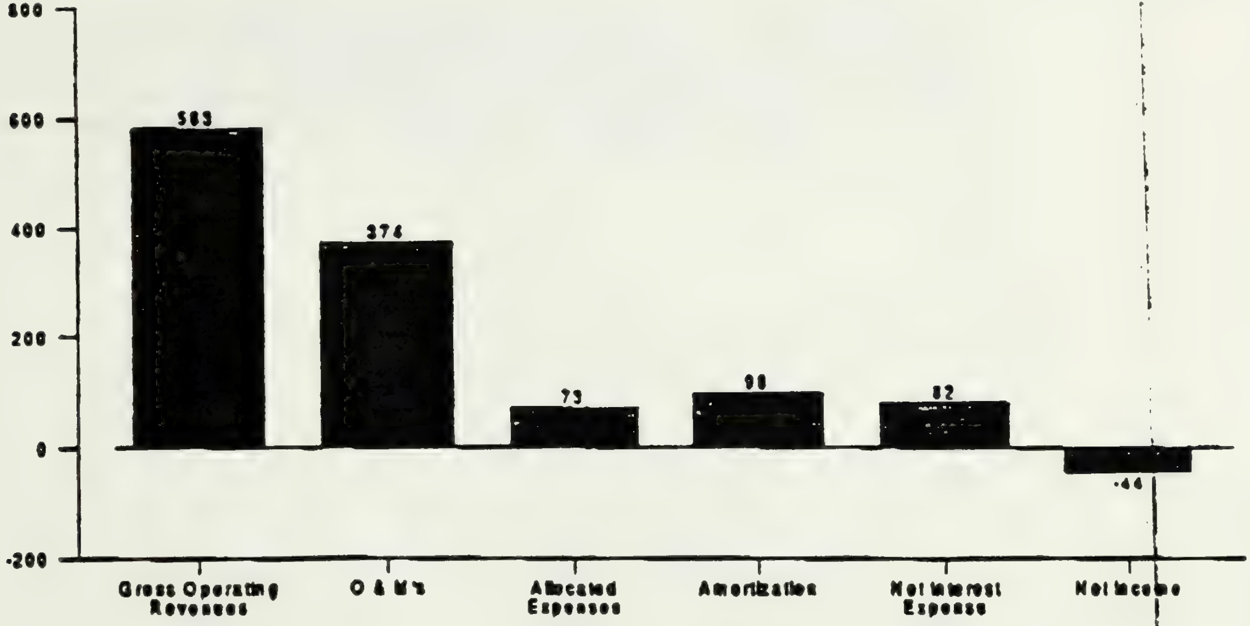

	1992 Budget	1991 Estimate	1990 Actual
Gross Operating Revenue	$583	$541	$467
Operating & Maintenance Expense	374	353	345
Allocated General Administrative and Development Expenses	73	76	92
Net Operating Revenue	136	112	30
Amortization	98	90	83
Net Interest Expense	82	64	46
Net Income	($44)	($42)	($99)
Return on Assets	2.0%	1.2%	(3.4%)

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7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

The Port Authority raises the necessary funds for the improvement, construction or acquisition of its facilities upon the basis of its own credit. Revenues generated by our facilities allow us to enter capital markets through the issuance of Consolidated Bonds.

8. What criteria do you use in deciding when and how much debt to issue?

The primary considerations in our debt issuance decisions are our needs as detailed in our Capital Plan (as approved by our Board of Commissioners,) our capacity to meet debt service requirements (as specified by the Consolidated Bond Resolution - Section 3 [adopted October 9, 1952]*) and market conditions.

*See attached Official Statement

DRAFT

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

The Port Authority has explored the use of joint development as a non-traditional source of financing. In recent years, we have considered, the sale of air rights over the Port Authority Bus Terminal for the construction of an office and/or hotel facility.

As part of the PATH Capital Improvement Program, we were successful in obtaining contributions from private real estate developers for three (3) stations that were rebuilt.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

The Port Authority has used to use privatization techniques as follows:

- Contracting out has been used for years to deliver, to varying degrees, maintenance, security, sanitation and cleaning services at all of our facilities.
- Commuter ferry service is provided under arrangement with the Port Authority by a private operator between Hoboken, NJ and lower Manhattan.
- Port Authority entered into Safe Harbor Lease agreements in connection with the purchase of PATH's rail fleet as well as buses for the states of New York and New Jersey.

IV. Coordinating Functions/Operations

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11. To what degree have you approached transit policy from an "intermodal" perspective? Please explain.

The Port Authority has to the greatest degree possible incorporated the intermodal perspective in the development of its facilities. Some examples include the Journal Square Transportation Center, Port Authority Bus Terminal, Lincoln Tunnel XBL (contra flow) lane, George Washington Bridge and Bus Station and Hoboken - Lower Manhattan Ferry service. There are facilities where connection between auto, bus, subway, commuter rail and/or ferry services are provided.

12. Do you "cross fund" projects with revenues generated from fares, fees, taxes, etc.? Please identify instances and explain rationale.

See answer to question #3 and #4 as well as Official Statement.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

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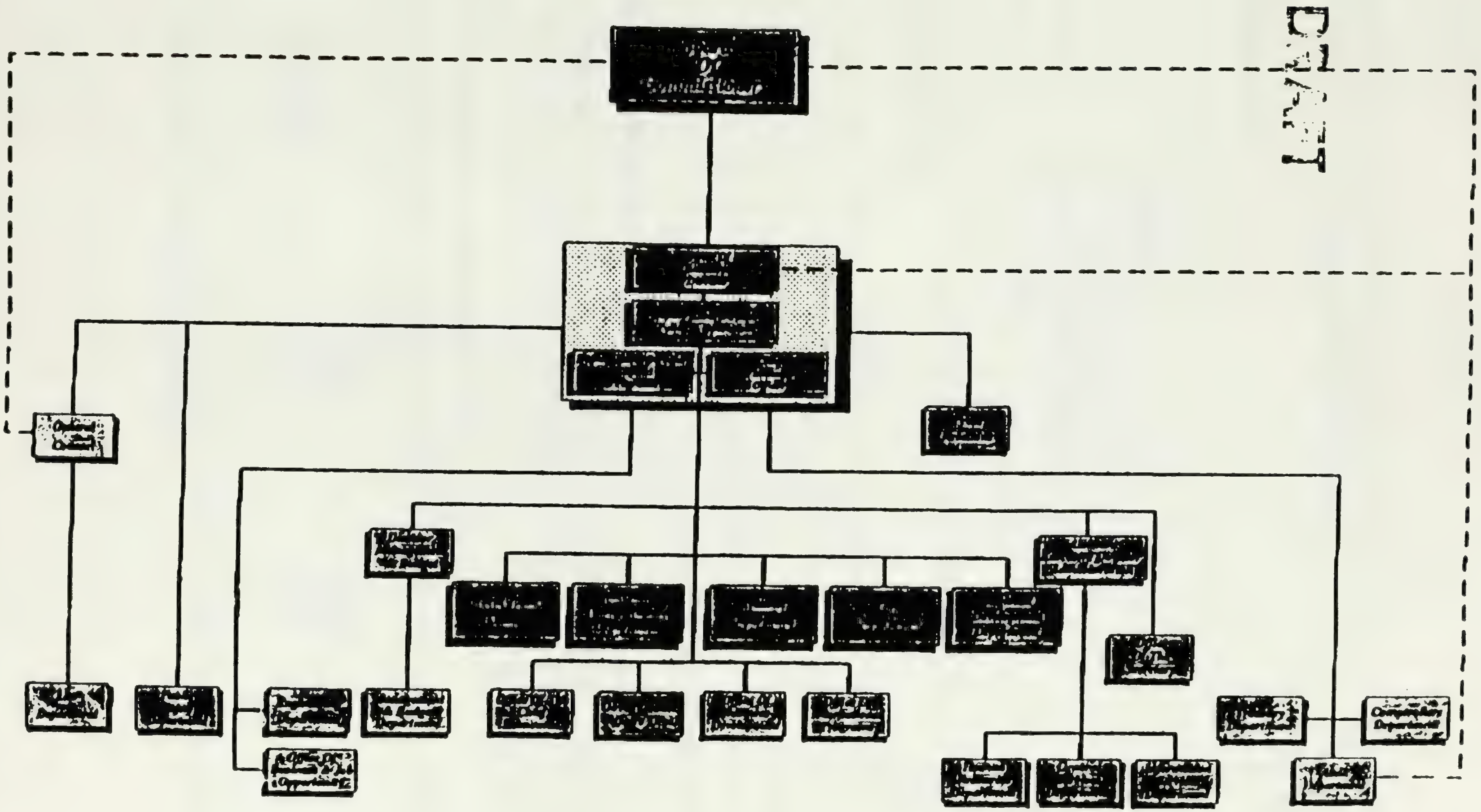
We have centralized many of the administrative functions in the Authority as shown on the attached organization chart. The Port Authority has staff departments in MIS, Finance, Engineering, Law and Human Resources, all of which provide direct support to the five line departments.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Compensation Department

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

Post-it™ brand fax transmittal memo 7671		# of pages ▸ 7	
To Christina Steinman		From Jim Bisson	
Co. DeWitte & Touche		Co. TxDOT	
Dept.		Phone # (512) 463 9956	
Fax # (202) 638 7844		Fax # (512) 475 2951	

II. Background Information

1.	Date	3/9/92
	Name	Jim Bisson
	Position	Planning and Research Analyst
	State/Organization	Texas DOT, Division of Planning and Policy
	Phone Number	(512) 463-9955

2. Other participants in the interview, or people contacted in conjunction with develo responses to this survey, are:

Name	Position	Phor

III. Funding/Financing Techniques

3. With respect to highway funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

- Federal Highway Funds
State dedicated motor fuel taxes and motor vehicle registration fees

For fiscal years 1992 and 1993 total appropriations for TxDOT is $2.4 billion and $2.3 billion respectively. Appropriations for construction, operations and maintenance is approximately:

	FY92(%)	FY93(%)
Construction	64.8%	67.2%
Operations *	11.5%	9.2%
Maintenance	23.4%	23.4%

** Includes Administration and Support, Auxiliary Operations, Public Transportation, Aviation, Motor Vehicle Regulation, Capitol Construction, Automation and Telecommunications Equipment.*

MASSACHUSETTS EXECUTIVE OFFICE OF Transportation

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To CHRIS STEINMAN	From Jim Bisson
Co. DELOITTE & TOUCHE	Co. Tx DOT
Dept.	Phone # 512/4639955
Fax # 202/638 7844	Fax # 512/475 2951

How adequate are these sources?

Current construction letting volume and right-of-way expenditure levels are inadequate to meet the amount of work that needs to be done.

Current financial resources are able to meet approximately 48% of work authorized by TTC and approximately 36% of identified needs.

. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

Funding sources are not providing adequate revenue in relation to costs. In constant 1970 dollars, aintenance expenditures increased from $89 million to $163 million from 1970 to 1990. In actual dollars here was a sevenfold increase in maintenance expenditures between 1970 and 1990. Likewise the 1990 investment n construction dollars is only 7% more than the 1970 investment.

Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

o.

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

No.

5. What criteria do you use in deciding when and how much debt to issue?

N/A

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

Not at this time. The Texas Transportation Institute at TAMU is conducting a study on alternative revenue sources. The study is to be completed by September 1992.

). To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc)? Please elaborate - cite examples; were they successful?

xDOT has been directed through the legislative process to:

1) Use private sector contracts for maintenance work if it "proves that a function of comparable quality and quantity can be purchased or performed at a savings of more than 10%." Provided this savings criteria is met, TxDOT shall use no less than 25% each year.

) Award a minimum dollar amount for maintenance projects by contract ranging from 30% in 1992 to 50% in 1996 of its maintenance expenditures–TxDOT must determine that a function of comparable quality and quantity can be purchased or performed at a savings through the use of private sector contracts.

DOT Maintenance and Operations Division indicates that for Fiscal Year 1991–approximately 27% of maintenance penditures was done by the private sector. For the current fiscal year it appears that amount will be close to 40%.

IV. Coordinating Functions/Operations

11. To what degree have you approached transportation policy from an "intermodal" perspective? Please explain.

The TxDOT strategic plan (which was published 10/25/90 and is being revised) has a stated goal to 'position the state to fully capitalize upon air, rail, sea, and highway transportation opportunities that maximize mobility and encourage economic growth in the most economical, effective, and efficient manner.' In addition, House Bill 9 enacted by the 72nd Texas legislature in 1991 established TxDOT by combining the Texas Department of Aviation and the State Department of Highways and Public Transportation (September 1, 1992 the Texas Motor Vehicle Commission will become part of TxDOT and by September 1, 1997 the Texas Turnpike Authority may become part of TxDOT). House Bill 9 also directed TxDOT to develop and implement a statewide transportation plan covering all modes of transportation–TxDOT must seek assistance from other governmental entities with responsibility for modes of transportation. (TxDOT is in the embryonic stage in developing this plan.)

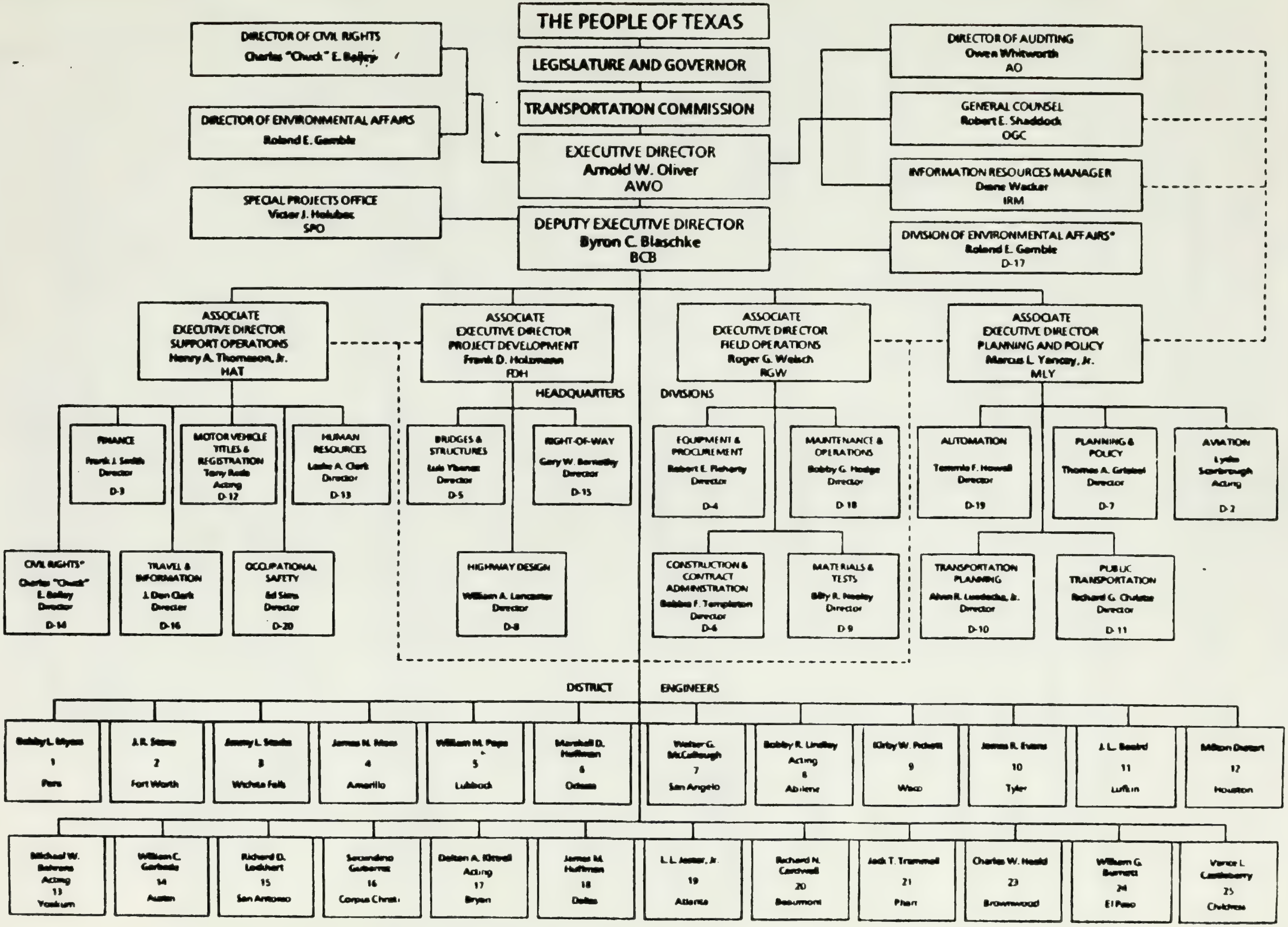
12. Do you "cross fund" projects with revenues generated from tolls, fees, taxes, etc.? Please identify instances and explain rationale.

No.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

See attached organization chart.

TxDOT has 24 highway districts and 20 headquarters support divisions. Each highway district is fairly autonomous and is responsible for performing all the functions to some degree. The headquarters divisions coordinate and support these activities on a statewide departmental basis. In certain areas such as major equipment and automation/telecommunication equipment, purchases are centrally managed. Also the statewide transportation plan as well as TxDOT strategic planning is done centrally. Construction contract letting and project development scheduling is also accomplished centrally.


THE PEOPLE OF TEXAS
LEGISLATURE AND GOVERNOR
TRANSPORTATION COMMISSION
EXECUTIVE DIRECTOR Arnold W. Oliver AWO
DEPUTY EXECUTIVE DIRECTOR Byron C. Blaschke BCB
DIRECTOR OF CIVIL RIGHTS Charles "Chuck" E. Bailey
DIRECTOR OF ENVIRONMENTAL AFFAIRS Roland E. Gamble
SPECIAL PROJECTS OFFICE Victor J. Holubec SPO
DIRECTOR OF AUDITING Owen Whitworth AO
GENERAL COUNSEL Robert E. Shaddock OGC
INFORMATION RESOURCES MANAGER Diane Wacker IRM
DIVISION OF ENVIRONMENTAL AFFAIRS* Roland E. Gamble D-17
ASSOCIATE EXECUTIVE DIRECTOR SUPPORT OPERATIONS Henry A. Thomason, Jr. HAT
ASSOCIATE EXECUTIVE DIRECTOR PROJECT DEVELOPMENT Frank D. Holzmann FDH
ASSOCIATE EXECUTIVE DIRECTOR FIELD OPERATIONS Roger G. Welsch RGW
ASSOCIATE EXECUTIVE DIRECTOR PLANNING AND POLICY Marcus L. Yancey, Jr. MLY
HEADQUARTERS
DIVISIONS
FINANCE Frank J. Smith Director D-3
MOTOR VEHICLE TITLES & REGISTRATION Terry Reade Acting D-12
HUMAN RESOURCES Leslie A. Clark Director D-13
CIVIL RIGHTS* Charles "Chuck" E. Bailey Director D-14
TRAVEL & INFORMATION J. Don Clark Director D-16
OCCUPATIONAL SAFETY Ed Sims Director D-20
BRIDGES & STRUCTURES Luis Ybanez Director D-5
RIGHT-OF-WAY Gary W. Bennethy Director D-15
HIGHWAY DESIGN William A. Lancaster Director D-8
EQUIPMENT & PROCUREMENT Robert E. Flaherty Director D-4
MAINTENANCE & OPERATIONS Bobby G. Hodge Director D-18
CONSTRUCTION & CONTRACT ADMINISTRATION Bobbie F. Templeton Director D-6
MATERIALS & TESTS Billy R. Neeley Director D-9
AUTOMATION Tommie F. Howell Director D-19
PLANNING & POLICY Thomas A. Griebel Director D-7
AVIATION Lydia Scarbrough Acting D-2
TRANSPORTATION PLANNING Alvin R. Luedecke, Jr. Director D-10
PUBLIC TRANSPORTATION Richard G. Christie Director D-11
DISTRICT ENGINEERS
Bobby L. Myers 1 Paris
J.R. Stone 2 Fort Worth
Jimmy L. Steele 3 Wichita Falls
James N. Moss 4 Amarillo
William M. Pope 5 Lubbock
Marshall D. Huffman 6 Odessa
Walter G. McCullough 7 San Angelo
Bobby R. Lindley Acting 8 Abilene
Kirby W. Pickett 9 Waco
James R. Evans 10 Tyler
J.L. Beaird 11 Lufkin
Milton Dietert 12 Houston
Michael W. Behrens Acting 13 Yoakum
William C. Garbade 14 Austin
Richard D. Lockhart 15 San Antonio
Secundino Gutierrez 16 Corpus Christi
Delton A. Kittrell Acting 17 Bryan
James M. Huffman 18 Dallas
L.L. Jester, Jr. 19 Atlanta
Richard N. Cardwell 20 Beaumont
Jack T. Trammell 21 Pharr
Charles W. Heald 23 Brownwood
William G. Barnett 24 El Paso
Vance L. Castleberry 25 Childress

--- FUNCTIONAL CC ON

* The directors of thes . report directly to the Executive Director as indicated above

TEXAS DEPARTMENT OF TRANS TON
ORGANIZATIONAL
February 11, 1992

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION

Transportation Issues Survey

II. Background Information

1. Date	
Name	Toronto
Position	
State/Organization	
Phone Number	

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	Position	Phone Number
[illegible]	Manager Corporate Planning	416- 393-[illegible]

III. Funding/Financing Techniques

3. With respect to transit funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

OPERATIONS & MAINTENANCE

FARE BOX	68%	}	USER'S FAIR SHARE FORMULA (ATTACHED)
MUNICIPALITY	16%		
PROVINCE of ONTARIO	16%		

CAPITAL PROJECTS:

PROVINCE OF ONTARIO	75%
MUNICIPALITY OF METROPOLITAN TORONTO	25%

4. How adequate are these sources?

METROPOLITAN TORONTO HAS FROZEN ITS FUNDING CONTRIBUTION IN 1992 AT THE 1991 LEVEL OF $114 MILLION WHICH IS BELOW THE 16% LEVEL IN THE USERS FAIR SHARE FORMULA.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

RECENT REPORT PREPARED FOR A COMMITTEE STUDYING LONG TERM ADEQUACY OF THE FORMULA CONCLUDED THE FORMULA WOULD LIKELY REQUIRE REVISION IN THE 1990's (REPORT ATTACHED) BECAUSE THE TTC's COSTS WERE RISING FASTER THAN INFLATION RATE & DEMOGRAPHIC TRENDS WHICH RESULTED IN LARGE INCREASE IN RIDERSHIP IN 1980's WOULD BE LESS FAVOURABLE

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

FOR NEW SUBWAY CONSTRUCTION PROJECTS METRO TORONTO IS CURRENTLY STUDYING METHODS OF VALUE CAPTURE ON LAND VALUE APPRECIATION. MAXIMUM ANTICIPATED CONTRIBUTION FROM THIS SOURCE IS APPROX. 15% OF THE CAPITAL COST OF CONSTRUCTION.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

No. - TTC CANNOT ~~AT~~ USE DEBT FINANCING

METROPOLITAN TORONTO MAY USE DEBT FINANCING FOR ITS 25% SHARE OF CAPITAL COST. METRO IS PROHIBITED BY LAW TO USE DEBT FINANCING FOR ITS OPERATIONS INCLUDING ITS 16% SHARE OF TTC OPERATING COSTS.

8. What criteria do you use in deciding when and how much debt to issue?

N/A.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

ANSWERED IN #6.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

HAVE NOT USED OR CONSIDERED THESE TECHNIQUES TO-DATE.

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

IV. Coordinating Functions/Operations

11. To what degree have you approached transit policy from an "intermodal" perspective? Please explain.

DECISIONS ON MODAL ISSUES ARE MADE AT THE PROVINCIAL LEVEL AND IN SOME CASES AT THE MUNICIPAL LEVEL.

METROPOLITAN TORONTO'S TRANSPORTATION POLICY IS BASED ON A "BALANCED TRANSPORTATION" SYSTEM OBJECTIVE WITH HIGH ~~[illegible]~~ TRANSIT MODE SHARE TO THE CBD AND MAJOR SUBURBAN CENTRES. (80% AND 60% RESPECTIVELY). NO NEW FREEWAYS ARE BEING CONSTRUCTED WITHIN METROPOLITAN TORONTO BUT A NEW FREEWAY ~~[illegible]~~ IS BEING CONSTRUCTED OUTSIDE THE REGION TO CONNECT SUBURBAN NODES.

12. Do you "cross fund" projects with revenues generated from fares, fees, taxes, etc.? Please identify instances and explain rationale.

PROVINCE OF ONTARIO "CROSS FUNDS"
ALL REVENUES SOURCES OF THE PROVINCE GO INTO "GENERAL REVENUE" FUND AND PROVINCIAL POLICY DETERMINES HOW THESE FUNDS WILL BE ALLOCATED.

THUS, TRANSPORTATION SOURCES SUCH AS GASOLINE TAXES, LICENCE FEES, COMMERCIAL CONCENTRATION TAX (ON PARKING), etc GO INTO THE "GENERAL REVENUE" FUND AND ARE NOT ~~NECE~~ DIRECTED TO TRANSPORTATION. CURRENTLY TRANSPORTATION REVENUES CONSIDERABLY EXCEED TRANSPORTATION EXPENDITURES.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

METROPOLITAN TORONTO THROUGH ITS PROPERTY DEPARTMENT ACQUIRES ALL LAND REQUIRED BY TTC AND FOR SUBWAY CONSTRUCTION. ONCE THE TRANSPORTATION FACILITIES HAVE BEEN CONSTRUCTED BY TTC, METRO PROPERTIES DEPARTMENT NEGOTIATES ALL AIR RIGHTS AND JOINT DEVELOPMENT AGREEMENTS FOR THE LAND. TTC'S PROPERTY DEPARTMENT RESPONSIBILITY IS CONFINED TO LEASES WITHIN THE STATIONS AND ANY DIRECT CONNECTIONS TO THE SUBWAY STRUCTURES FROM NEARBY DEVELOPMENTS.

METROPOLITAN TORONTO IS RESPONSIBLE FOR ALL NEW RAPID TRANSIT LINE PRELIMINARY PLANNING

MASSACHUSETTS EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
Transportation Issues Survey

II. Background Information

1. Date	3/13/92
Name	Helga Morgenstern
Position	Director for Financial Planning
State/Organization	Washington State Dept. of Transportation
Phone Number	(206) 753-6010

2. Other participants in the interview, or people contacted in conjunction with developing responses to this survey, are:

Name	***Position*** /Division	***Phone Number***
Gene Cathcart	Program Development	(206) 753-7366
John Doyle	Transit Research &	(206) 753-1778
	Intermodal Planning	

III. Funding/Financing Techniques

3. With respect to highway funding, what are your principal sources of revenue? Please indicate as a percentage of total the amount allocated for construction and operations & maintenance.

- State Gasoline Tax (23 Cents/Gallon)
- Motor Vehicle Excise Tax (2.2% of Vehicle Value) (1/2% of Vehicle Value Dedicated to Transportation and Ferries
- Licenses, Permits and Fees
- Federal Highway Funds
- Bonds (Interstate Completion Match and Capacity Improvement Program)

Construction and Maintenance on State Highways Use About 40% of State Revenues

4. How adequate are these sources?

Washington Legislature passed a major transportation revenue package in 1990 with the understanding that this would fund WSDOT's requirements through 1995. However, ever increasing needs out pace available revenues at an alarming rate.

5. How are funding sources responding with respect to cost and are they providing adequate revenue in relation to operating costs?

The flat cents per gallon gas tax does not keep up with inflation. Historical growth patterns in vehicle related fees come closer, ~~but~~ the Motor Vehicle Excise Tax grows at a rate of about twice the inflation growth.

6. Are there any new or unique funding sources which you are considering? What are they and why are they being considered?

Several taxes are being discussed. However, no time frame has been established yet for taking the request to the legislature:

- Funding of environmental impacts on transportation
    - Tax discussed is on value of petroleum products.

7. Are any of your funding sources (or combination of funding sources) used to leverage debt? Please elaborate.

- So far, the fuel tax which is deposited into the Motor Vehicle Fund (dedicated to highway purposes) is the only tax source pledged to debt service.
- Current thinking is more for pay as you go, with the exception of bonding for capital facilities, three major construction projects that already have fuel tax of .75 cents dedicated, jumbo ferries and matching funds for the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) demonstration projects.

8. What criteria do you use in deciding when and how much debt to issue?

Historically, highway debt has ranged between 10% and 20% of revenues. There is no statutory limit for transportation debt.

Legislative appropriations authorize bond sales for the biennial budget period, so the decision on how much debt to issue depends on available tax revenues and legislative discretion.

9. Are you considering any innovative financing sources (for example, value capture, joint development, etc.)? Please explain.

Tax increment financing does not seem to be a viable option in Washington. However, cooperative, multijurisdictional and private sector funding are being pursued. In addition there are a number of local option taxes authorized but not yet imposed. Washington has laws authorizing transportation benefit districts along with mechanisms to take advantage of developer contributions.

10. To what degree have you considered or used privatization techniques (for example, contracting out, turn key construction, sale of assets, etc.)? Please elaborate - cite examples; were they successful?

This issue is revisited on a regular basis. Some activities are currently contracted out – design and preliminary engineering efforts, surveying, right of way appraisals, environmental studies are some examples.

IV. Coordinating Functions/Operations

11. To what degree have you approached transportation policy from an "intermodal" perspective? Please explain.

The Department of Transportation has established the 'Transportation Policy Plan' process. Policies are developed by the cross-section of the states citizens and interest groups. Transportation policies address all modes and topical areas such as energy, land-use and the environment. The policies are furnished to the State Transportation Commission and the Legislature for adoption. Enclosed are the 1991 Policy Plan which discusses the process and the 1992 update of the Plan.

12. Do you "cross fund" projects with revenues generated from tolls, fees, taxes, etc.? Please identify instances and explain rationale.

With the exception of the Ferry System, Washington has no toll roads. Ferry fares are applied to operations and maintenance only along with tax subsidies. Capital projects are fully funded by tax revenues and possibly bond sales.

13. Have you attempted to coordinate/integrate any administrative or management functions and perform them centrally on behalf of "operating entities" (for example, capital budgeting or finance, accounting, MIS, engineering, etc.)? Please identify areas and impact.

WSDOT operates on the principle that the Assistant Secretaries are the policy makers while the District Administrators are the executors and implementors of those policies. WSDOT also has a participatory management philosophy which allows input by all into the decision making process.

Example:

- Finance and Budget establishes budge policies with the full cooperation and input from all program managers (Assistant Secretaries) after they have incorporated input from the Districts.
- Program Development establishes programming policies after receiving full input from the Districts.

However, implementation of all functional requirements remains decentralized:

While Headquarters establishes accounting polices and rules, accounting functions continue to be performed at the District and Division level. MIS is administered by Headquarters, but all Divisions and Districts have MIS representatives on their staff.

CAPITAL SPENDING SUMMARY

(Constant Dollars in Millions - Cash Flow)

State Fiscal Year

Highway	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Advertising Program										
State Share	132	135	127	127	127	127	127	127	127	127
Federal Share	246	256	243	235	234	234	234	234	234	234
Other Projects										
State Share	102	165	152	152	152	152	152	152	152	152
Federal Share	29	30	30	30	30	30	30	30	30	30
- Subtotal Non-CA/T	509	587	551	544	543	543	543	543	543	543
CA/T (Modified)	414	886	751	514	824	949	777	417	147	37
Incremental 8.1D	0	9	9	42	64	85	85	64	42	0
- Subtotal CA/T	414	895	760	556	888	1034	862	481	189	37
- Total MHD	923	1482	1311	1100	1431	1577	1405	1024	732	580

MHD Capital Program

24-Mar-92 11:45

BASELINE Assumptions
Based on FY 92 Advertising Program, FY 92 - FY 97 & DPW Capital
Needs Assesment 1992 - 1996, Does not include CA/T

	Funding Split - 92		Funding Split 93-97		93-97	Historical Data (CY)					Projected Data (Calender Years)									
(FY 92 Dollars in Millions)	Federal	State	Federal	State	Prog.	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01
Advertising Program (dated 3/14/92)																				
Project Types																				
Interstate																				
Interstate Maintenance	89%	11%	90%	10%	228.1						37.7	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Interstate Transfer	85%	15%	85%	15%	7.0						4.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Bridges	80%	20%	80%	20%	445.8	93 - 97					132.7	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
NHS	86%	14%	80%	20%	513.2	FIVE YEAR					84.2	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6	102.6
STP	80%	20%	80%	20%	194.9	TOTAL					13.9	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
STP/HES	80%	20%	81%	19%	13.7	(105 Plan)					3.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Urban Systems	80%	20%			0.0						15.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazard Elimination	89%	11%			0.0						3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non Federal Aid Projects	0%	100%		100%	375.0						74.2	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Demonstration Project			95%	5%	25.6						0.3	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Total Capital Program					1,803.3	241.0	183.0	41.0	425.0	400.0	369.5	360.7	360.7	360.7	360.7	360.7	360.7	360.7	360.7	360.7
						Historical Advertising numbers														
State Funding						provided by DPW														
Interstate		0%		0%	0.0	Split of 87 - 90 Advert Prog					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interstate Maintenance		11%		10%	22.8	Based on share of projected					4.1	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Interstate Transfer		15%		15%	1.0	costs					0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Bridges		20%		20%	89.0	State Share 35%					26.5	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
NHS		14%		20%	102.3	Federal Share 65%					11.8	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
STP		20%		20%	39.1						2.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
STP/HES		20%		19%	2.7						0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Urban Systems		20%		0%	0.0						3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazard Elimination		11%		0%	0.0						0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non Federal Aid Projects		100%		100%	375.0						74.2	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Demonstration Project		0%		5%	1.2						0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total State Capital Program					633.2	84.4	64.1	14.4	148.8	140.0	124.2	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6
Federal Funding																				
Interstate	0%		0%		0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interstate Maintenance	89%		90%		205.2						33.6	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
Interstate Transfer	85%		85%		6.0						3.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Bridges	80%		80%		356.8						106.2	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
NHS	86%		80%		410.9						72.5	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
STP	80%		80%		155.8						11.1	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
STP/HES	80%		81%		11.1						3.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Urban Systems	80%		0%		0.0						12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazard Elimination	89%		0%		0.0						2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non Federal Aid Projects	0%		0%		0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Demonstration Project	0%		95%		24.3						0.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Total Federal Capital Program					1,170.1	156.7	119.0	26.7	276.3	260.0	244.9	234.0	234.0	234.0	234.0	234.0	234.0	234.0	234.0	234.0

34%	35%	35%	35%	35%	35%	35%	35%	35%	35%
66%	65%	65%	65%	65%	65%	65%	65%	65%	65%

Spending Curve from Year of Advertising

	Funding Split – 92		Funding Split 93–97		93–97	Historical Data (FY)					Projected Data (FY)									
(FY 92 Dollars in Millions)	Federal	State	Federal	State	Prog.	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01
Advertising Program in Calender Year																				
State Program						84.4	64.1	14.4	148.8	140.0	124.2	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6	126.6
Federal Program						156.7	119.0	26.7	276.3	260.0	244.9	234.0	234.0	234.0	234.0	234.0	234.0	234.0	234.0	234.0
Spend Out of Advertising Program	Spending Curve from Year of Advertising																			
State Program	Year	1 Year	2 Years	3 Years	4 Years	5 Years					132.2	135.4	126.7	126.4	126.6	126.6	126.6	126.6	126.6	126.6
Federal Program	Advertised	Out	Out	Out	Out	Out					245.6	256.3	242.6	235.1	234.0	234.0	234.0	234.0	234.0	234.0
	0%	35%	55%	10%	0%	0%														
Other Projects – Total Cost																				
Chapter 90 Local Aid	0%	100%	0%	100%	67.0	93–97 ANN. AMTS					29.2	80.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
PWED Grants	0%	100%	0%	100%	10.0	FROM 92 – 96					10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
DPW Personnel	40%	60%	40%	60%	50.0	DPW					46.7	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Design & Research	50%	50%	50%	50%	20.0	NEEDS ASSMT					20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
ROW, Judgements, etc.	0%	100%	0%	100%	35.0	DOCUMENT					35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Total Other Projects					182.0						140.9	195.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0
Other Project – State Funded																				
Chapter 90 Local Aid		100%		100%	67.0						29.2	80.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
PWED Grants		100%		100%	10.0						0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
DPW Personnel		60%		60%	30.0						28.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Design & Research		50%		50%	10.0						10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
ROW, Judgements, etc.		100%		100%	35.0						35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Total Other Projects – State Funded					152.0						102.2	165.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0
Other Project – Federally Funded																				
Chapter 90 Local Aid	0%		0%		0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PWED Grants	0%		0%		0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPW Personnel	40%		40%		20.0						18.7	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Design & Research	50%		50%		10.0						10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
ROW, Judgements, etc.	0%		0%		0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Projects – Federally Funded					30.0						28.7	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Project Costs						Advertising Program Only														
State Program					152.0	135.2	88.6	114.3	100.0	102.1	234.4	300.4	278.7	278.4	278.6	278.6	278.6	278.6	278.6	278.6
Federal Program					30.0	245.7	250.1	261.3	229.0	244.7	274.3	286.3	272.6	265.1	264.0	264.0	264.0	264.0	264.0	264.0
Total Project Costs					182.0	380.9	338.7	375.6	329.0	346.8	508.7	586.7	551.3	543.5	542.7	542.7	542.7	542.7	542.7	542.7

Proposed Action vs Scheme 8.1D Cashflow Analysis (x $1000)
p:\group\coef\wks\oblig\fy\bdrc_apf.wk3

24-Mar-92

Fiscal Year:	Pre 92	92	93	94	95	96	97	98	99	00	01	Later
Proposed Action												
Incremental	317,275	414,358	893,975	787,217	599,762	928,132	1,025,722	716,334	276,813	74,612	98	0
Cumulative	317,275	731,632	1,625,608	2,412,825	3,012,587	3,940,718	4,966,440	5,682,774	5,959,587	6,034,199	6,034,297	6,034,297
Scheme 8.1D												
Proposed Action Values with Contract Dates Modified to Scheme 8.1D												
Incremental	317,275	414,358	885,904	751,149	514,163	823,832	949,453	777,150	417,467	146,695	36,853	0
Cumulative	317,275	731,632	1,617,536	2,368,685	2,882,848	3,706,680	4,656,133	5,433,283	5,850,750	5,997,445	6,034,297	6,034,297
Additional Dollars for Scheme 8.1D per BDRC Memorandum = 91 $, No Contingency												
Incremental	0	0	8,000	8,000	38,000	57,000	76,000	76,000	57,000	38,000	0	0
Cumulative	0	0	8,000	16,000	54,000	111,000	187,000	263,000	320,000	358,000	358,000	358,000 [400]
Total												
Incremental	317,275	414,358	893,904	759,149	552,163	880,832	1,025,453	853,150	474,467	184,695	36,853	0
Cumulative	317,275	731,632	1,625,536	2,384,685	2,936,848	3,817,680	4,843,133	5,696,283	6,170,750	6,355,445	6,392,297	6,392,297
Difference												
Scheme 8.1D less Proposed Action												
Incremental	0	0	(71)	(28,069)	(47,599)	(47,299)	(269)	136,816	197,654	110,083	36,754	0
Cumulative	0	0	(71)	(28,140)	(75,739)	(123,038)	(123,307)	13,509	211,162	321,246	358,000	358,000

Contracts Affected by Scheme 8.1D.

	Proposed Action		Scheme 8.1D		Difference	
	NTP	Complete	NTP	Complete	NTP Months	Complete Months
D015A	01-Jun-92	20-Aug-94	01-Apr-93	30-Jan-95	10	5
D019A	28-Oct-92	18-Sep-94	28-Jan-93	20-Jan-94	3	(8)
D019B	31-Dec-92	21-Nov-94	24-Jul-93	21-Dec-94	7	1
C12A1	28-Feb-94	04-Dec-97	08-Apr-93	31-May-96	(11)	(18)
C15A1	19-Jun-94	14-Nov-98	01-Jul-95	18-Dec-99	12	13
C15A2	21-Apr-94	04-Nov-98	01-Jul-95	18-Dec-99	14	13
C18A1	03-Aug-97	01-Mar-2000	18-Aug-98	17-Mar-2001	12	13
C18C1	03-Aug-97	01-Mar-2000	18-Aug-98	17-Mar-2001	12	13
C19A1	04-Oct-93	05-Apr-95	09-Oct-94	29-Jul-96	12	16
C19B1	01-Jul-94	29-Jun-98	02-Oct-95	13-Jan-99	15	7
C20B1	14-Jan-94	30-Dec-99	14-Jan-95	20-Feb-2001	12	14
C22A2	01-Feb-94	05-Dec-99	01-Feb-94	12-Mar-2001	0	15

-Feb-92

TOTAL PROJECT ANNUAL FORECAST SUMMARY
($ x 1,000)

(ALL VALUES SHOWN EXCLUDE ESCALATION BEYOND OCTOBER, 1991)

	ORIGINAL 1991 ICE (AS SUBMITTED) (12/89 $)	ESCALATION FROM 12/89 TO 10/91	1991 ICE (RESTATED IN 10/91$)	CURRENT* PROJECT ESTIMATE (10/91 $)	ESTIMATE CHANGE (10/91 $)
DESIGN ENGINEERING:					
MANAGEMENT CONSULTANT	136,723	12,168	148,891	234,874	85,983
SDC FINAL DESIGN	121,198	10,787	131,985	220,714	88,729
AREA GEOTECHNICAL CONSULTANTS	7,878	701	8,579	16,217.	7,638
UTILITY AGENCY DESIGN =7	(DISTRIBUTED)	0	(DISTRIBUTED)	25,343	25,343
TOTAL DESIGN ENGINEERING	265,799	23,656	289,456	497,148	207,692
RIGHT OF WAY PROCUREMENT	296,203	11,848	308,051	298,837	(9,214)
CONSTRUCTION CONTRACTS	3,860,712	170,257	4,030,969	4,120,279	89,310
UTILITIES CONSTRUCTION FA	(DISTRIBUTED)	0	(DISTRIBUTED)	121,405	121,405
CONSTRUCTION ENGINEERING AND CONTINGENCY (=79)					
CONSTRUCTION CONTINGENCY	98,704	4,353	103,057	288,420	185,363
MANAGEMENT CONSULTANT	416,020	37,026	453,046	261,262	(191,784)
SDC CONSTRUCTION SERVICES	34,982	3,113	38,095	43,845	5,750
TOTAL CONSTRUCTION ENGINEERING AND CONTINGENCY	549,706	44,492	594,198	593,527	(671)
TOTAL PRESENT-DAY ESTIMATE OF 1991 ICE SCOPE	4,972,420	250,254	5,222,674	5,631,196	408,521
ADDED PROJECT SCOPE SINCE ICE SUBMITTAL:					
1) DEWEY SQUARE TUNNEL "FULL BUILD": C18C1					
MANAGEMENT CONSULTANT	3,654	325	3,979	3,026	(953)
SDC FINAL DESIGN	4,071	362	4,433	1,332	(3,101)
RIGHT OF WAY PROCUREMENT	9,000	360	9,360	0	(9,360)
CONSTRUCTION	81,000	3,572	84,572	33,867	(50,705)
CONSTRUCTION CONTINGENCY	10,125	447	10,572	2,371	(8,201)
TOTAL	107,850	5,066	112,916	40,596	(72,320)
2) CANA "LOOP" RAMP CONNECTORS C194					
MANAGEMENT CONSULTANT	1,006	90	1,096	1,510	414
SDC FINAL DESIGN	6,062	540	6,602	3,733	(2,869)
RIGHT OF WAY PROCUREMENT	17,942	718	18,660	2,180	(16,480)
CONSTRUCTION	74,495	3,285	77,780	62,355	(15,425)
CONSTRUCTION CONTINGENCY	13,084	577	13,661	4,365	(9,296)
TOTAL	112,589	5,209	117,798	74,143	(43,655)
3) W. VA. MEMORIAL TUNNEL FIRE TESTS C20C2					
MANAGEMENT CONSULTANT C8	0	0	0	6,340	6,340
SDC FINAL DESIGN	0	0	0	0	[illegible]
RIGHT OF WAY PROCUREMENT	0	0	0	0	[illegible]
CONSTRUCTION	0	0	0	26,540	26,540
CONSTRUCTION CONTINGENCY	0	0	0	726	726
TOTAL	0	0	0	33,606	33,606
TOTAL ADDED PROJECT SCOPE SINCE 1991 ICE SUBMITTAL	220,439	10,275	230,714	148,345	(82,369)
TOTAL CURRENT PROJECT SCOPE	5,192,859	260,529	5,453,388	5,779,540	326,152

* NOTE: ALL VALUES ABOVE EXCLUDE OBLIGATIONS PRIOR TO ICE OF $255,149

CA/T PROJECT

Assumptions

Scope of Project based on Proposed Action

Cost Estimates from October 91 Annual Project Forecast for "to go" costs as of December 1989
(does not include approximately $250million in Pre Ice Obligations)

Project Schedules reflect current plan as of October 1991

Level of Engineering estimates from December 91 Progress Report

Funding splits provided by CA/T Project Team

Inflation factor used 3.5% annually

Flat project spending assumed across State fiscal years based on scheduled start and end dates

ROW Costs incurred at Obligation Date

Program Management/Preliminary Engineering spread evenly across SFY 91 – SFY 94

Construction Management/Construction Support spread with overall construction spending

Utility Force account costs included with construction costs and section design costs

CA/T Project Summary

Scenario (Early = 0, Late = 1) 0.0%
Overrun Flag (1 = ON, 0 = Off) 0

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
SOUTH BOSTON														
	Section Design Consultants	27,772	27,772	6.9	11.0	6.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	69,917	69,917	0.0	32.5	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	423,728	453,262	0.0	54.7	57.6	97.5	96.6	49.1	50.8	52.6	46.3	0.0	0.0
	SUBTOTAL SOUTH BOSTON	**521,417**	**550,950**	**6.9**	**98.2**	**102.3**	**101.9**	**96.6**	**49.1**	**50.8**	**52.6**	**46.3**	**0.0**	**0.0**
EAST BOSTON / TTT														
	Section Design Consultants	30,945	30,945	20.7	1.7	3.7	3.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	69,842	69,842	0.0	61.2	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	730,001	780,882	1.0	159.1	194.5	188.0	168.9	55.7	33.5	34.7	0.0	0.0	0.0
	SUBTOTAL EAST BOSTON/TTT	**830,788**	**881,669**	**21.6**	**222.0**	**207.2**	**191.2**	**171.1**	**55.7**	**33.5**	**34.7**	**0.0**	**0.0**	**0.0**
SOUTH BAY														
	Section Design Consultants	76,358	76,358	1.8	18.5	26.2	25.8	7.3	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	72,240	72,240	0.0	33.0	24.8	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	890,665	952,047	0.0	0.0	30.6	157.4	180.4	174.5	180.6	202.3	183.4	0.0	0.0
	SUBTOTAL SOUTH BAY	**1,039,263**	**1,100,645**	**1.8**	**51.6**	**81.8**	**199.4**	**187.7**	**174.5**	**180.6**	**202.3**	**183.4**	**0.0**	**0.0**
CENTRAL ARTERY														
	Section Design Consultants	77,684	77,684	9.7	24.6	24.2	16.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	46,273	46,273	0.0	42.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	1,485,672	1,589,223	0.0	2.2	65.7	324.7	268.1	266.4	275.7	304.7	249.5	92.8	0.0

CA/T Project Summary

Scenario (Early = 0, Late = 1)	0.0%
Overrun Flag (1 = ON, 0 = Off)	0

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
	SUBTOTAL CENTRAL ARTERY	1,609,629	1,713,180	9.7	68.8	94.4	341.4	269.7	266.4	275.7	304.7	249.5	92.8	0.0
CENTRAL ARTERY NORTH														
	Section Design Consultants	26,447	26,447	0.0	2.2	13.7	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	23,000	23,000	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	377,263	403,558	0.0	0.0	0.0	35.7	130.3	96.6	100.0	103.5	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	426,710	453,005	0.0	2.2	37.5	47.5	130.3	96.6	100.0	103.5	0.0	0.0	0.0
PROJECTWIDE														
	Management Consultant/Preliminary Engineering	245,750	245,750	61.4	61.4	61.4	61.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Management Consultant/Construction Support	261,262	261,262	0.0	11.0	21.4	43.8	46.0	35.8	35.9	36.6	25.6	5.1	0.0
	Geotechnical Services	16,216	16,216	6.5	3.2	3.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Section Design Consultants	55,762	55,762	17.8	21.7	10.9	5.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	19,747	19,747	0.0	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	457,118	487,406	7.1	32.2	80.9	95.9	98.2	63.8	66.0	38.3	39.6	24.3	0.0
	SUBTOTAL PROJECT WIDE	1,055,855	1,086,143	92.8	149.3	178.0	209.8	145.3	99.6	101.9	74.9	65.2	29.4	0.0
	Totals	5,483,662	5,785,593	132.9	592.0	701.1	1,091.3	1,000.8	741.9	742.5	772.7	544.4	122.2	0.0
	Cumulative Totals			132.9	724.9	1,425.9	2,517.3	3,518.0	4,259.9	5,002.4	5,775.2	6,319.6	6,441.8	6,441.8

CA/T Project Summary

Scenario (Early = 0, Late = 1) 0.0%
Overrun Flag (1 = ON, 0 = Off) 0

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
Project Costs By Contract Type														
	Total SDC Costs	818,196	818,196	124.8	155.4	171.0	175.9	58.2	35.8	35.9	36.6	25.6	5.1	0.0
	Total ROW Costs	301,019	301,019	0.0	188.5	100.8	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Construction Costs	4,364,447	4,666,379	8.1	248.2	429.3	899.1	942.6	706.1	706.6	736.1	518.8	117.1	0.0
	Total Project Costs	5,483,662	5,785,593	132.9	592.0	701.1	1,091.3	1,000.8	741.9	742.5	772.7	544.4	122.2	0.0
	Percentage Spending by Year			2%	9%	11%	17%	16%	12%	12%	12%	8%	2%	0%
Project Costs by Funding Source														
	Federal IC	3,258,478	3,437,275	87.9	402.0	490.0	653.9	623.3	408.8	400.6	385.4	287.9	60.1	0.0
	Federal Non-IC	1,491,759	1,574,401	28.4	115.2	125.9	292.5	246.8	230.3	238.0	275.8	179.7	44.4	0.0
	State & Local	733,554	774,047	16.5	74.9	85.2	144.9	130.7	102.8	103.8	111.6	76.8	17.7	0.0
	Total Project	5,483,791	5,785,724	132.9	592.1	701.1	1,091.3	1,000.8	741.9	742.5	772.7	544.4	122.2	0.0
Percentage Breakout by Funding Source														
	Federal IC	59%	59%	66%	68%	70%	60%	62%	55%	54%	50%	53%	49%	0%
	Federal Non-IC	27%	27%	21%	19%	18%	27%	25%	31%	32%	36%	33%	36%	0%
	State & Local	13%	13%	12%	13%	12%	13%	13%	14%	14%	14%	14%	15%	0%
	Total Project	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Cumulative Project Costs by Funding Source														
	Federal IC			87.9	489.9	979.9	1,633.8	2,257.1	2,665.9	3,066.5	3,451.9	3,739.8	3,799.9	3,799.9
	Federal Non-IC			28.4	143.6	269.5	562.0	808.8	1,039.1	1,277.2	1,552.9	1,732.7	1,777.1	1,777.1
	State & Local			16.5	91.4	176.6	321.6	452.3	555.1	658.9	770.5	847.2	865.0	865.0
	Total Project			132.9	725.0	1,426.1	2,517.4	3,518.2	4,260.1	5,002.6	5,775.3	6,319.7	6,441.9	6,441.9

CA/T Project Summary

Scenario (Early = 0, Late = 1)	0.0%
Overrun Flag (1 = ON, 0 = Off)	0

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
	SUBTOTAL CENTRAL ARTERY	**1,609,629**	**1,713,180**	**9.7**	**68.8**	**91.2**	**318.7**	**243.3**	**232.1**	**232.1**	**247.8**	**196.1**	**70.5**	**0.0**
CENTRAL ARTERY NORTH														
	Section Design Consultants	26,447	26,447	0.0	2.2	13.2	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	23,000	23,000	0.0	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	717,263	767,256	0.0	0.0	0.0	85.3	169.5	136.2	136.2	136.2	52.0	52.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	**766,710**	**816,703**	**0.0**	**2.2**	**36.2**	**96.3**	**169.5**	**136.2**	**136.2**	**136.2**	**52.0**	**52.0**	**0.0**
PROJECT WIDE														
	Management Consultant/Preliminary Engineering	245,750	245,750	61.4	61.4	61.4	61.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Management Consultant/Construction Support	261,262	261,262	0.0	11.0	21.4	43.8	46.0	35.8	35.9	36.6	25.6	5.1	0.0
	Geotechnical Services	16,216	16,216	6.5	3.2	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Section Design Consultants	55,762	55,762	17.8	21.7	10.6	4.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	Right of Way	19,747	19,747	0.0	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Construction	457,118	487,406	7.1	32.2	78.1	89.5	88.6	55.6	55.6	31.2	31.2	18.4	0.0
	SUBTOTAL PROJECT WIDE	1,055,855	1,086,143	92.8	149.3	174.8	202.8	135.6	91.4	91.5	67.8	58.7	23.8	0.0
	Totals	5,823,662	6,149,291	132.9	592.0	680.2	1,077.7	959.1	703.1	682.8	687.4	485.3	146.0	0.0
	Cumulative Totals			132.9	724.9	1,405.0	2,482.7	3,441.8	4,144.9	4,827.7	5,515.2	6,000.5	6,146.5	6,146.5

CA/T SDC Costs

Includes Management Consulting costs of $245,750 (P/E) & $261,262 (Constr. support)
Does not include $26,245 obligated prior ICE
Construction support costs of $43,847 included with and
spread over period of design
Also includes $25,343 of design force account costs
Includes $16,216 of Geotechnical Services costs

Package	Description	Est. Proj. Cost 10/91 $'s	Level Of Engineering	SDC Contingency	Overrun Factor	Revised Total Cost	Early Obligate	Early Start	Early Complete	Duration FY's
SOUTH BOSTON										
D001A	I-90 SOUTH BOSTON INTERCHANGE	10,538	1			10,538	05-May-92	04-Jun-92	02-Dec-93	3
D001B	VENT BUILDING 5 SUPERSTRUCTURE	1,192	1			1,192	08-Jun-92	08-Jul-92	03-Jul-93	2
D002A	SOUTH BOSTON HAUL ROAD	1,055	4			1,055	26-Dec-88	25-Jan-89	16-Feb-91	3
D004A	I-90 BMIP TUNNEL	11,648	4			11,648	19-Sep-90	19-Oct-90	18-Oct-91	2
D024A	SERVICE/ADMINISTRATION COMPLEX	3,338	2			3,338	01-Apr-92	09-Feb-92	15-Oct-92	2
C25A1	Remediation – South Boston Haul Road									
	SUBTOTAL SOUTH BOSTON	27,772				27,772				
EAST BOSTON / ITT										
D005A	I-90 IMMERSED TUBE TUNNEL	1,387	4			1,387	15-Oct-89	14-Nov-89	14-Nov-89	1
D005B	I-90 TUNNEL FINISHES	2,324	3			2,324	22-Oct-90	21-Nov-90	11-Apr-91	1
D007A	I-90 BIRD ISLAND FLATS (BIF)	14,165	4			14,165	31-Oct-90	30-Nov-90	09-Dec-90	1
D007B	I-90 PORTER STREET OUTFALL SEWERS	2,787	4			2,787	18-Jun-90	18-Jul-90	18-Jul-90	1
D007C	I-90 EAST BOSTON TOLL PLAZA AND FACILITIE	1,061	1			1,061	01-Apr-92	25-Apr-92	20-Jan-93	2
D007D	AIRPORT INTERCHANGE	3,396				3,396	01-Apr-92	19-May-92	24-Jan-94	3
D008A	EAST BOSTON AIRPORT/ROUTE 1A INTERCHAN	5,825	1			5,825	05-Feb-93	07-Mar-93	05-Sep-94	3
R05A2	Building Demolition, South Boston									
R07A3	Demolition of Logan Airport Buildings									
	SUBTOTAL EAST BOSTON/ITT	30,945				30,945				
SOUTH BAY										
D009A	SOUTH BAY NB TUNNEL, WEST SHORE	24,542	2			24,542	03-Nov-91	03-Dec-91	05-Jul-93	3
D009B	SOUTH BAY FORT POINT CHANNEL CROSSING	11,848	1			11,848	15-Jul-92	14-Aug-92	11-Feb-94	2
D009C	SOUTH BAY, RANDOLPH TO KNEELAND STREET	18,144	1			18,144	02-Aug-92	01-Sep-92	02-Jul-94	3
D009D	SOUTH BAY INTERSECTION RESTORATION	1,103	1			1,103	30-Sep-93	30-Oct-93	30-Oct-94	2
D009E/F	FORT POINT CHANNEL RESTORATION	1,424	1			1,424	01-Sep-92	01-Oct-92	01-Sep-93	2
D010A	I-93 SOUTH BAY TEMPORARY BRIDGE UNDERP	7,605	2			7,605	28-Apr-92	28-Apr-92	28-Apr-92	1
D012A	I-93 MASS AVENUE INTERCHANGE	5,264	1			5,264	03-Jun-92	03-Jul-92	01-Oct-93	2
D013A	SOUTH BOSTON BYPASS ROAD	3,666	2			3,666	11-Sep-91	11-Oct-91	06-Oct-92	2
D014A	NEW EASTSIDE INTERCEPT RELOCATION	2,762	3			2,762	29-Apr-90	29-May-90	22-Sep-91	3
	SUBTOTAL SOUTH BAY	76,358				76,358				
CENTRAL ARTERY										
D011A	I-93 ATLANTIC AVENUE	12,372	2			12,372	11-Sep-91	11-Oct-91	10-Jan-93	2
D014B	I-93 CENTRAL ARTERY UTILITY RELOCATION	2,609	3			2,609	04-Nov-90	04-Dec-90	26-Sep-91	2
D014C	I-93 CENTRAL ARTERY UTILITY RELOCATION	3,849	3			3,849	04-Nov-90	04-Dec-90	01-Nov-91	2
D015A	I-93 CENTRAL ARTERY, NORTH TO CAUSEWAY	21,373	1			21,373	02-Mar-92	01-Apr-92	19-Jan-94	3
D015C	I-93 CENTRAL ARTERY SURFACE RESTORATIO	1,285	1			1,285	26-Nov-92	26-Dec-92	25-Dec-93	2
D016A	PARCEL 7	3,200	2			3,200	15-Apr-92	16-Apr-92	16-Jun-93	2
D017A	I-93 CENTRAL ARTERY, CONGRESS TO NORTH	25,749	2			25,749	13-May-91	12-Jun-91	15-Sep-93	4

CA/T Project Summary

Scenario (Early = 0, Late = 1) 0.0%
Overrun Flag (1 = ON, 0 = Off) 0

92 $

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
Project Costs By Contract Type														
	Total SDC Costs	818,196	818,196	124.8	155.4	168.0	171.2	57.0	35.8	35.9	36.6	25.6	5.1	0.0
	Total ROW Costs	301,019	301,019	0.0	188.5	97.3	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Construction Costs	4,704,447	5,030,077	8.1	248.2	414.8	891.3	902.1	667.2	646.9	650.8	459.7	140.9	0.0
	Total Project Costs	5,823,662	6,149,291	132.9	592.0	680.2	1,077.7	959.1	703.1	682.8	687.4	485.3	146.0	0.0
	Percentage Spending by Year			2%	10%	11%	18%	16%	11%	11%	11%	8%	2%	0%
Project Costs by Funding Source														
	Federal IC	3,258,478	3,437,275	87.9	402.0	475.1	614.5	564.9	358.9	340.7	317.6	229.5	46.3	0.0
	Federal Non-IC	1,491,759	1,574,401	28.4	115.2	122.4	275.0	223.8	202.0	202.0	226.3	142.8	34.1	0.0
	State & Local	1,073,554	1,137,745	16.5	74.9	82.7	188.2	170.4	142.1	140.1	143.6	113.0	65.6	0.0
	Total Project	5,823,791	6,149,422	132.9	592.1	680.2	1,077.7	959.1	703.1	682.8	687.4	485.3	146.0	0.0
Percentage Breakout by Funding Source														
	Federal IC	56%	56%	66%	68%	70%	57%	59%	51%	50%	46%	47%	32%	0%
	Federal Non-IC	26%	26%	21%	19%	18%	26%	23%	29%	30%	33%	29%	23%	0%
	State & Local	18%	19%	12%	13%	12%	17%	18%	20%	21%	21%	23%	45%	0%
	Total Project	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Cumulative Project Costs by Funding Source														
	Federal IC			87.9	489.9	965.0	1,579.5	2,144.4	2,503.3	2,844.0	3,161.6	3,391.0	3,437.4	3,437.4
	Federal Non-IC			28.4	143.6	266.1	541.1	764.9	966.9	1,168.9	1,395.2	1,538.0	1,572.0	1,572.0
	State & Local			16.5	91.4	174.1	362.3	532.7	674.8	815.0	958.6	1,071.6	1,137.2	1,137.2
	Total Project			132.9	725.0	1,405.2	2,482.9	3,442.0	4,145.1	4,827.9	5,515.3	6,000.6	6,146.6	6,146.6

CA/T SDC Costs

Includes Management Consulting costs of $245,750 (P/E) & $261,262 (Constr. support)
Does not include $26,245 obligated prior ICE
Construction support costs of $43,847 included with and
spread over period of design
Also includes $25,343 of design force account costs
Includes $16,216 of Geotechnical Services costs

Package	Description	Est. Proj. Cost 10/91 $'s	Level Of Engineering	SDC Contingency	Overrun Factor	Revised Total Cost	Early			Duration FY's
							Obligate	Start	Complete	
D017B	I-93 CENTRAL ARTERY, MBTA BLUE LINE CROS	2,955	2			2,955	---	---	---	---
D018A/C	I-93 DEWEY SQUARE TUNNEL	2,695	1			2,695	29-May-93	28-Jun-93	28-Jun-95	3
D018B	I-93 DEWEY SQUARE TRANSFORMERS	0	4			0	---	---	---	---
D018C	I-93 SUMMER TO KNEELAND	1,598				1,598	29-May-93	28-Jun-93	28-Jun-95	3
	SUBTOTAL CENTRAL ARTERY	77,684				77,684				
CENTRAL ARTERY NORTH										
D019A	I-93 CENTRAL ARTERY NORTH OF CAUSEWAY	4,498	2			4,498	02-Apr-92	02-May-92	07-May-93	2
D019B	I-93 VIADUCTS AND RAMPS NORTH OF CHARL	21,554	1			21,554	02-Oct-92	01-Nov-92	01-Feb-94	2
D019C	CHARLES RIVER BASIN RESTORATION	40	1			40	17-Jan-93	16-Feb-93	17-Nov-93	2
D019D	CHARLES RIVER BRIDGES AND VIADUCTS	114	1			114	28-Sep-92	28-Oct-92	29-Apr-94	2
D019E	SCIENCE PARK UNDERPINNING	240	1			240	28-Sep-92	28-Oct-92	28-Jan-94	2
D019F	CHARLES RIVER BASIN FERRY/WHARF	0	1			0	17-Mar-93	16-Apr-93	16-Jan-94	2
D019G	CHARLES RIVER AND TUNNELS N. OF RIVER	0				0	26-Mar-93	25-Apr-93	15-Sep-94	3
	SUBTOTAL CENTRAL ARTERY NORTH	28,447				28,447				
PROJECTWIDE										
	Management Consultant/Preliminary Engineering	245,750				245,750				
	Management Consultant/Construction Support	261,262				261,262				
	Geotechnical Services	16,216				16,216	29-Aug-89	27-Sep-89	06-Apr-94	5
D020A	I-90 MECHANICAL/ELECTRICAL	5,238	3			5,238	31-Oct-90	30-Nov-90	30-May-92	2
D020B	I-93 MECHANICAL/ELECTRICAL	11,271	2			11,271	29-May-91	28-Jun-91	28-Jun-93	3
D021A	MATERIALS DISPOSAL SYSTEM	5,984	2			5,984	02-Jun-91	02-Jul-91	30-Aug-92	2
D021B	MATERIALS PROCESSING SYSTEM	0	4			0				
D021C	SPECTACLE ISLAND SURFACE RESTORATION	1,208	2			1,208	27-Jan-93	26-Feb-93	26-Nov-93	2
D022A	INTEGRATED PROJECT CONTROLS (IPCS)	12,899	2			12,899	12-May-91	11-Jun-91	09-Sep-93	4
C008	Pest Control									
M025A	ASSESSMENT AND REMEDIATION	6,782				6,782	13-Nov-89	13-Dec-89	14-Dec-89	1
M025B	PHASE I/II ARCHAEOLOGY	0				0	31-May-87	30-Jun-87	02-Jul-87	2
M025C	PROJECT CONSERVATOR – 3RD WORK PROGR	42				42	01-Oct-92	24-Jun-88	25-Jun-88	1
M025D	PROJECT CONSERVATOR – 2ND WORK PROGR	1,090				1,090	02-Dec-90	01-Jan-91	02-Jan-91	1
M025E	PHASE III ARCHAEOLOGY – I-93/I-90	1,935				1,935	29-Jan-92	28-Feb-92	01-Mar-92	1
M025F	HABS/HAER DOCUMENTATION	1,000				1,000	02-Jul-93	01-Aug-93	01-Aug-94	2
M025G	PHASE III ARCHAEOLOGY – MATERIALS DISPOS	110				110	14-Oct-90	30-Nov-90	01-Dec-90	1
M025H	PROJECT CONSERVATOR – 3RD WORK PROGR	1,048				1,048	02-Jul-93	01-Aug-93	01-Aug-94	2
M025S	PROJECTWIDE SAFETY CONSULTANT	5,156				5,156	01-Apr-92	27-Mar-92	28-Mar-92	1
M025T	PUBLIC INFORMATION CONTRACT	2,000				2,000	01-Jul-92	26-Feb-92	27-Feb-92	1
	SUBTOTAL PROJECT WIDE	578,990				578,990				
	Totals	818,196				818,196				
	Cumulative Totals									

CONFIDENTIAL -- PRELIMINARY DRAFT

CA/T SDC Costs

Includes Management Consulting costs of $245,750 (P/E) & $2
Does not include $26,245 obligated prior ICE
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spread over period of design
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Package	Description	Late			Duration	Funding Splits – %			
		Obligate	Start	Complete	Days	Federal IC	Federal NON-IC	State/ Local	Total
SOUTH BOSTON									
D001A	I-90 SOUTH BOSTON INTERCHANGE					90%		10%	100%
D001B	VENT BUILDING 5 SUPERSTRUCTURE					90%		10%	100%
D002A	SOUTH BOSTON HAUL ROAD					36%	48%	16%	100%
D004A	I-90 BMIP TUNNEL					90%		10%	100%
D024A	SERVICE/ADMINISTRATION COMPLEX					90%		10%	100%
C25A1	Remediation – South Boston Haul Road								
	SUBTOTAL SOUTH BOSTON								
EAST BOSTON / ITT									
D005A	I-90 IMMERSED TUBE TUNNEL					90%		10%	100%
D005B	I-90 TUNNEL FINISHES					90%		10%	100%
D007A	I-90 BIRD ISLAND FLATS (BIF)					90%		10%	100%
D007B	I-90 PORTER STREET OUTFALL SEWERS					90%		10%	100%
D007C	I-90 EAST BOSTON TOLL PLAZA AND FACILITIE					90%		10%	100%
D007D	AIRPORT INTERCHANGE					90%		10%	100%
						90%		10%	100%
D008A	EAST BOSTON AIRPORT/ROUTE 1A INTERCHAN					0%	80%	20%	100%
R05A2	Building Demolition, South Boston								
R07A3	Demolition of Logan Airport Buildings								
	SUBTOTAL EAST BOSTON/ITT								
SOUTH BAY									
D009A	SOUTH BAY NB TUNNEL, WEST SHORE					90%		10%	100%
D009B	SOUTH BAY FORT POINT CHANNEL CROSSING					90%		10%	100%
D009C	SOUTH BAY, RANDOLPH TO KNEELAND STREET					90%		10%	100%
D009D	SOUTH BAY INTERSECTION RESTORATION					90%		10%	100%
D009E/F	FORT POINT CHANNEL RESTORATION					90%		10%	100%
						90%		10%	100%
D010A	I-93 SOUTH BAY TEMPORARY BRIDGE UNDERF					90%		10%	100%
D012A	I-93 MASS AVENUE INTERCHANGE					0%	80%	20%	100%
D013A	SOUTH BOSTON BYPASS ROAD					0%	80%	20%	100%
D014A	NEW EASTSIDE INTERCEPT RELOCATION					90%		10%	100%
	SUBTOTAL SOUTH BAY								
CENTRAL ARTERY									
D011A	I-93 ATLANTIC AVENUE					90%		10%	100%
D014B	I-93 CENTRAL ARTERY UTILITY RELOCATION					0%	80%	20%	100%
D014C	I-93 CENTRAL ARTERY UTILITY RELOCATION					23%	60%	17%	100%
D015A	I-93 CENTRAL ARTERY, NORTH TO CAUSEWAY					0%	80%	20%	100%
D015C	I-93 CENTRAL ARTERY SURFACE RESTORATIO					0%	80%	20%	100%
D016A	PARCEL 7					0%	80%	20%	100%
D017A	I-93 CENTRAL ARTERY, CONGRESS TO NORTH					0%	80%	20%	100%

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Package	Description	Late				Funding Splits – %			
		Obligate	Start	Complete	Duration Days	Federal IC	Federal NON–IC	State/ Local	Total
D017B	I–93 CENTRAL ARTERY, MBTA BLUE LINE CROS					0%	80%	20%	100%
D018A/C	I–93 DEWEY SQUARE TUNNEL					90%		10%	100%
D018B	I–93 DEWEY SQUARE TRANSFORMERS					90%		10%	100%
D018C	I–93 SUMMER TO KNEELAND					90%		10%	100%
	SUBTOTAL CENTRAL ARTERY								
CENTRAL ARTERY NORTH									
D019A	I–93 CENTRAL ARTERY NORTH OF CAUSEWAY					90%		10%	100%
D019B	I–93 VIADUCTS AND RAMPS NORTH OF CHARL					90%		10%	100%
D019C	CHARLES RIVER BASIN RESTORATION					90%		10%	100%
D019D	CHARLES RIVER BRIDGES AND VIADUCTS					90%		10%	100%
D019E	SCIENCE PARK UNDERPINNING					90%		10%	100%
D019F	CHARLES RIVER BASIN FERRY/WHARF					90%		10%	100%
D019G	CHARLES RIVER AND TUNNELS N. OF RIVER					90%		10%	100%
	SUBTOTAL CENTRAL ARTERY NORTH								
PROJECTWIDE									
	Management Consultant/Preliminary Engineering					59%	28%	13%	100%
	Management Consultant/Construction Support					59%	28%	13%	100%
	Geotechnical Services					45%	40%	15%	100%
D020A	I–90 MECHANICAL/ELECTRICAL					90%		10%	100%
D020B	I–93 MECHANICAL/ELECTRICAL					68%	20%	13%	101%
D021A	MATERIALS DISPOSAL SYSTEM					68%	20%	13%	100%
D021B	MATERIALS PROCESSING SYSTEM					68%	20%	13%	100%
D021C	SPECTACLE ISLAND SURFACE RESTORATION					68%	20%	13%	100%
D022A	INTEGRATED PROJECT CONTROLS (IPCS)					90%		10%	100%
C008	Pest Control								
M025A	ASSESSMENT AND REMEDIATION					90%		10%	100%
M025B	PHASE I/II ARCHAEOLOGY					90%		10%	100%
M025C	PROJECT CONSERVATOR – 3RD WORK PROGR					90%		10%	100%
M025D	PROJECT CONSERVATOR – 2ND WORK PROGR					90%		10%	100%
M025E	PHASE III ARCHAEOLOGY – I–93/I–90					90%		10%	100%
M025F	HABS/HAER DOCUMENTATION					90%		10%	100%
M025G	PHASE III ARCHAEOLOGY – MATERIALS DISPOS					90%		10%	100%
M025H	PROJECT CONSERVATOR – 3RD WORK PROGR					90%		10%	100%
M025S	PROJECTWIDE SAFETY CONSULTANT					68%	20%	13%	100%
M025T	PUBLIC INFORMATION CONTRACT					68%	20%	13%	100%
	SUBTOTAL PROJECT WIDE								
	Totals								
	Cumulative Totals								

CA/T SDC Costs

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Package	Description	Spent	Projected Costs by State Fiscal Year -- Inflated Dollars									
		Jul-85 Jun-91	Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
SOUTH BOSTON												
D001A	I-90 SOUTH BOSTON INTERCHANGE	0.0	3.5	3.6	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D001B	VENT BUILDING 5 SUPERSTRUCTURE	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D002A	SOUTH BOSTON HAUL ROAD	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D004A	I-90 BMIP TUNNEL	5.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D024A	SERVICE/ADMINISTRATION COMPLEX	0.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C25A1	Remediation – South Boston Haul Road											
	SUBTOTAL SOUTH BOSTON	6.9	11.0	6.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAST BOSTON / ITT												
D005A	I-90 IMMERSED TUBE TUNNEL	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D005B	I-90 TUNNEL FINISHES	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007A	I-90 BIRD ISLAND FLATS (BIF)	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007B	I-90 PORTER STREET OUTFALL SEWERS	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007C	I-90 EAST BOSTON TOLL PLAZA AND FACILITIE	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007D	AIRPORT INTERCHANGE	0.0	1.1	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D008A	EAST BOSTON AIRPORT/ROUTE 1A INTERCHAN	0.0	0.0	2.0	2.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0
R05A2	Building Demolition, South Boston											
R07A3	Demolition of Logan Airport Buildings											
	SUBTOTAL EAST BOSTON/ITT	20.7	1.7	3.7	3.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0
SOUTH BAY												
D009A	SOUTH BAY NB TUNNEL, WEST SHORE	0.0	8.2	8.5	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D009B	SOUTH BAY FORT POINT CHANNEL CROSSING	0.0	0.0	6.1	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D009C	SOUTH BAY, RANDOLPH TO KNEELAND STREET	0.0	0.0	6.3	6.5	6.7	0.0	0.0	0.0	0.0	0.0	0.0
D009D	SOUTH BAY INTERSECTION RESTORATION	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
D009E/F	FORT POINT CHANNEL RESTORATION	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D010A	I-93 SOUTH BAY TEMPORARY BRIDGE UNDERP	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D012A	I-93 MASS AVENUE INTERCHANGE	0.0	0.0	2.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D013A	SOUTH BOSTON BYPASS ROAD	0.0	1.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D014A	NEW EASTSIDE INTERCEPT RELOCATION	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BAY	1.8	18.5	26.2	25.8	7.3	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL ARTERY												
D011A	I-93 ATLANTIC AVENUE	0.0	6.2	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D014B	I-93 CENTRAL ARTERY UTILITY RELOCATION	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D014C	I-93 CENTRAL ARTERY UTILITY RELOCATION	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D015A	I-93 CENTRAL ARTERY, NORTH TO CAUSEWAY	0.0	7.1	7.4	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D015C	I-93 CENTRAL ARTERY SURFACE RESTORATIO	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D016A	PARCEL 7	0.0	1.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D017A	I-93 CENTRAL ARTERY, CONGRESS TO NORTH	6.4	6.4	6.7	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CONFIDENTIAL -- PRELIMINARY DRAFT

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spread over period of design
Also includes $25,343 of design force account costs
Includes $16,216 of Geotechnical Services costs

Package	Description	Spent Jul-85 Jun-91	Projected Costs by State Fiscal Year -- Inflated Dollars Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
D017B	I-93 CENTRAL ARTERY, MBTA BLUE LINE CROS											
D018A/C	I-93 DEWEY SQUARE TUNNEL	0.0	0.0	0.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
D018B	I-93 DEWEY SQUARE TRANSFORMERS											
D018C	I-93 SUMMER TO KNEELAND	0.0	0.0	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY	9.7	24.8	24.2	16.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL ARTERY NORTH												
D019A	I-93 CENTRAL ARTERY NORTH OF CAUSEWAY	0.0	2.2	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019B	I-93 VIADUCTS AND RAMPS NORTH OF CHARL	0.0	0.0	11.2	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019C	CHARLES RIVER BASIN RESTORATION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019D	CHARLES RIVER BRIDGES AND VIADUCTS	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019E	SCIENCE PARK UNDERPINNING	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019F	CHARLES RIVER BASIN FERRY/WHARF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019G	CHARLES RIVER AND TUNNELS N. OF RIVER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	0.0	2.2	13.7	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROJECTWIDE												
	Management Consultant/Preliminary Engineering	61.4	61.4	61.4	61.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Management Consultant/Construction Support	0.0	11.0	21.4	43.8	46.0	35.8	35.9	36.6	25.6	5.1	0.0
	Geotechnical Services	6.5	3.2	3.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D020A	I-90 MECHANICAL/ELECTRICAL	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D020B	I-93 MECHANICAL/ELECTRICAL	3.8	3.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D021A	MATERIALS DISPOSAL SYSTEM	0.0	3.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D021B	MATERIALS PROCESSING SYSTEM											
D021C	SPECTACLE ISLAND SURFACE RESTORATION	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D022A	INTEGRATED PROJECT CONTROLS (IPCS)	3.2	3.2	3.3	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C00B	Pest Control											
M025A	ASSESSMENT AND REMEDIATION	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025B	PHASE I/II ARCHAEOLOGY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025C	PROJECT CONSERVATOR - 3RD WORK PROGR	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025D	PROJECT CONSERVATOR - 2ND WORK PROGR	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025E	PHASE III ARCHAEOLOGY - 1-93/I-90	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025F	HABS/HAER DOCUMENTATION	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0
M025G	PHASE III ARCHAEOLOGY - MATERIALS DISPOS	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025H	PROJECT CONSERVATOR - 3RD WORK PROGR	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
M025S	PROJECTWIDE SAFETY CONSULTANT	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M025T	PUBLIC INFORMATION CONTRACT	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL PROJECT WIDE	85.7	97.3	97.2	113.9	47.1	35.8	35.9	36.6	25.6	5.1	0.0
	Totals	124.8	155.4	171.0	175.9	58.2	35.8	35.9	36.6	25.6	5.1	0.0
	Cumulative Totals	124.8	280.2	451.2	627.1	685.2	721.1	756.9	793.5	819.1	824.2	824.2

CA/T ROW Costs

Package	Description	Est. Proj. Cost 10/91 $'s	Level Of Engineering	ROW Contingency	Overrun Factor	Revised Total Cost	Early			
							Obligate	Start	Complete	Duration Days
SOUTH BOSTON										
D001A	I-90 SOUTH BOSTON INTERCHANGE	37,423	1			37,423	01-Apr-93			
D002A	SOUTH BOSTON HAUL ROAD	13,844	4			13,844	30-Sep-91			
D004A	I-90 BMIP TUNNEL	18,650	4			18,650	30-Sep-91			
	SUBTOTAL SOUTH BOSTON	69,917				69,917				
EAST BOSTON / ITT										
D005A	I-90 IMMERSED TUBE TUNNEL	3,839	4			3,839	30-Sep-91			
D007A	I-90 BIF	16,832	4			16,832	30-Sep-91			
D007B	I-90 PORTER ST OUTFALL SEWERS	546	4			546	30-Sep-91			
D007C	I-90 E. BOSTON TOLL PLAZA	125				125	01-Jan-93			
D007D	E. BOSTON AIRPORT INTERCHANGE	8,500				8,500	01-Dec-92			
D008A1	EB AIRPORT/RT 1A INTERCHANGE	40,000	1			40,000	31-Mar-92			
R05A1	BUILDING DEMOLITION (PAPPAS RELOCATION)	0	4			0	01-Feb-90			
R05A1	BUILDING DEMOLITION, SOUTH BOSTON ACTU	0	4			0	28-Sep-90			
	SUBTOTAL EAST BOSTON/ITT	69,842				69,842				
SOUTH BAY										
D009A	S BAY NB TUNNEL, WEST SHORE, VENT BLDG	32,540	2			32,540	01-Jan-92			
D009B	I-90 S BAY FORT POINT CHANNEL CROSSING	14,000	1			14,000	01-Apr-94			
D009C	S BAY NB TUNNEL, WEST SHORE, VENT BLDG	1,200	1			1,200	01-Apr-94			
D012A	I-93 MASS AVE INTERCHANGE	14,000	1			14,000	01-Apr-93			
D013A	SO BOSTON BYPASS ROAD	10,000	2			10,000	01-Apr-93			
D014A	NEW EASTSIDE INTERCEPT RELOC	500	3			500	31-Mar-92			
	SUBTOTAL SOUTH BAY	72,240				72,240				
CENTRAL ARTERY										
D011A	I-93 ATLANTIC AVE	4,300	2			4,300	01-Apr-93			
D014B	CA UTIL RELOCATION	18,973	3			18,973	31-Mar-92			
D014C	CA UTIL RELOCATION	23,000	3			23,000	31-Mar-92			
D015A	CA NORTH TO CAUSEWAY	0	1			0	01-Apr-94			
D017A	CA CONGRESS TO NORTH	0	2			0	01-Apr-94			

CONFIDENTIAL -- PRELIMINARY DRAFT

CA/T ROW Costs

Package	Description	Est. Proj. Cost 10/91 $'s	Level Of Engineering	ROW Contingency	Overrun Factor	Revised Total Cost	Early Obligate	Early Start	Early Complete	Duration Days
D018A	DEWEY SQUARE TUNNEL	0	1			0	31-Mar-92			
	SUBTOTAL CENTRAL ARTERY	46,273				46,273				
CENTRAL ARTERY NORTH										
D019A	CA NORTH OF CAUSEWAY (CANA)	23,000	2			23,000	01-Apr-93			
D019B	CA NORTH OF CAUSEWAY	0	1			0	01-Apr-94			
	SUBTOTAL CENTRAL ARTERY NORTH	23,000				23,000				
PROJECTWIDE										
D021A	MATERIALS DISPOSAL (DRY DOCK 3 LEASE)	2,000	2			2,000	01-Apr-92			
D021B	MATERIALS PROCESSING SYSTEM	17,747	4			17,747	01-Apr-92			
	SUBTOTAL PROJECT WIDE	19,747				19,747				
	Totals	301,019				301,019				
	Cumulative Totals									

CA/T ROW Costs

Package	Description	Late				Funding Splits – %			
		Obligate	Start	Complete	Duration Days	Federal IC	Federal NON-IC	State/ Local	Total
SOUTH BOSTON									
D001A	I-90 SOUTH BOSTON INTERCHANGE	01-Apr-93				90%		10%	100%
D002A	SOUTH BOSTON HAUL ROAD	30-Sep-91				36%	48%	16%	100%
D004A	I-90 BMIP TUNNEL	30-Sep-91				90%		10%	100%
	SUBTOTAL SOUTH BOSTON								
EAST BOSTON / ITT									
D005A	I-90 IMMERSED TUBE TUNNEL	30-Sep-91				90%		10%	100%
D007A	I-90 BIF	30-Sep-91				90%		10%	100%
D007B	I-90 PORTER ST OUTFALL SEWERS	30-Sep-91				90%		10%	100%
D007C	I-90 E. BOSTON TOLL PLAZA	01-Jan-93				90%		10%	100%
D007D	E. BOSTON AIRPORT INTERCHANGE	01-Dec-92				90%		10%	100%
D008A1	EB AIRPORT/RT 1A INTERCHANGE	31-Mar-92					80%	20%	100%
R05A1	BUILDING DEMOLITION (PAPPAS RELOCATION)	01-Feb-90							0%
R05A1	BUILDING DEMOLITION, SOUTH BOSTON ACTU	28-Sep-90							0%
	SUBTOTAL EAST BOSTON/ITT								
SOUTH BAY									
D009A	S BAY NB TUNNEL, WEST SHORE, VENT BLDG	01-Jan-92				90%		10%	100%
D009B	I-90 S BAY FORT POINT CHANNEL CROSSING	01-Apr-94				90%		10%	100%
D009C	S BAY NB TUNNEL, WEST SHORE, VENT BLDG	01-Apr-94				90%		10%	100%
D012A	I-93 MASS AVE INTERCHANGE	01-Apr-93					80%	20%	100%
D013A	SO BOSTON BYPASS ROAD	01-Apr-93					80%	20%	100%
D014A	NEW EASTSIDE INTERCEPT RELOC	31-Mar-92				90%		10%	100%
	SUBTOTAL SOUTH BAY								
CENTRAL ARTERY									
D011A	I-93 ATLANTIC AVE	01-Apr-93				90%		10%	100%
D014B	CA UTIL RELOCATION	31-May-92					80%	20%	100%
D014C	CA UTIL RELOCATION	31-May-92				23%	60%	17%	100%
D015A	CA NORTH TO CAUSEWAY	01-Apr-94					80%	20%	100%
D017A	LA CONGRESS TO NORTH	01-Apr-94				45%	40%	15%	100%

CONFIDENTIAL --- PRELIMINARY DRAFT

CA/T ROW Costs

Package	Description	Late				Funding Splits – %			
		Obligate	Start	Complete	Duration Days	Federal IC	Federal NON–IC	State/ Local	Total
D018A	DEWEY SQUARE TUNNEL	31–Mar–92				90%		10%	100%
	SUBTOTAL CENTRAL ARTERY								
CENTRAL ARTERY NORTH									
D019A	CA NORTH OF CAUSEWAY (CANA)	01–Apr–93				90%		10%	100%
D019B	CA NORTH OF CAUSEWAY	01–Apr–94				90%		10%	100%
	SUBTOTAL CENTRAL ARTERY NORTH								
PROJECTWIDE									
D021A	MATERIALS DISPOSAL (DRY DOCK 3 LEASE)	01–Apr–92				68%	20%	13%	100%
D021B	MATERIALS PROCESSING SYSTEM	01–Apr–92				68%	20%	13%	100%
	SUBTOTAL PROJECT WIDE								
	Totals								
	Cumulative Totals								

CA/T ROW Costs

Package	Description	Spent	Projected Costs by State Fiscal Year -- Inflated Dollars									
		Jul-85 Jun-91	Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
SOUTH BOSTON												
D001A	I-90 SOUTH BOSTON INTERCHANGE	0.0	0.0	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D002A	SOUTH BOSTON HAUL ROAD	0.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D004A	I-90 BMIP TUNNEL	0.0	18.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BOSTON	0.0	32.5	38.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAST BOSTON / ITT												
D005A	I-90 IMMERSED TUBE TUNNEL	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007A	I-90 BIF	0.0	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007B	I-90 PORTER ST OUTFALL SEWERS	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007C	I-90 E. BOSTON TOLL PLAZA	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D007D	E. BOSTON AIRPORT INTERCHANGE	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D008A1	EB AIRPORT/RT 1A INTERCHANGE	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R05A1	BUILDING DEMOLITION (PAPPAS RELOCATION)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R05A1	BUILDING DEMOLITION, SOUTH BOSTON ACTU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL EAST BOSTON/ITT	0.0	61.2	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SOUTH BAY												
D009A	S BAY NB TUNNEL, WEST SHORE, VENT BLDG	0.0	32.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D009B	I-90 S BAY FORT POINT CHANNEL CROSSING	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D009C	S BAY NB TUNNEL, WEST SHORE, VENT BLDG	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D012A	I-93 MASS AVE INTERCHANGE	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D013A	SO BOSTON BYPASS ROAD	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D014A	NEW EASTSIDE INTERCEPT RELOC	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BAY	0.0	33.0	24.8	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL ARTERY												
D011A	I-93 ATLANTIC AVE	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D014B	CA UTIL RELOCATION	0.0	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D014C	CA UTIL RELOCATION	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D015A	CA NORTH TO CAUSEWAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D017A	CA CONGRESS TO NORTH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CA/T ROW Costs

Package	Description	Spent Jul-85 Jun-91	Projected Costs by State Fiscal Year -- Inflated Dollars Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
D018A	DEWEY SQUARE TUNNEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY	0.0	42.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTRAL	ARTERY NORTH											
D019A	CA NORTH OF CAUSEWAY (CANA)	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D019B	CA NORTH OF CAUSEWAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROJECT	WIDE											
D021A	MATERIALS DISPOSAL (DRY DOCK 3 LEASE)	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D021B	MATERIALS PROCESSING SYSTEM	0.0	17.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL PROJECT WIDE	0.0	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Totals	0.0	188.5	100.8	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cumulative Totals	0.0	188.5	289.2	305.5	305.5	305.5	305.5	305.5	305.5	305.5	305.5

CA/T Construction Costs

Construction Contingency	7.0%
Overrun Contingency Factors	
Level 1 – 25% Design not Completed	13.0%
Level 2 – P/E Compl./25% Design Completed	11.0%
Level 3 – 75% Design Submitted	9.0%
Level 4 – PS&E Submitted	7.0%
Level 5 – Not Currently Used	5.0%
Complete	0.0%

Package	Description	Est. Proj. Cost 10/91 $'s	Level Of Engineering	Construction Contingency	Overrun Factor	Revised Total Cost	Early			
							Obligate	Start	Complete	Duration FY's
SOUTH BOSTON		Q								
C01A1	I–90 South Boston Interchange	204,036	1	14,221	0	218,257	02–Dec–93	01–Apr–94	31–Dec–98	6
C01B1	Vent Building (VB) 5	17,957	1	1,252	0	19,209	02–Dec–95	31–Mar–96	31–Mar–98	3
C02A1	South Boston Haul Road	10,936	2	762	0	11,698	16–Sep–91	14–Jan–92	03–Aug–93	3
C04A1	South Boston Railroad Relocation	1,858	2	130	0	1,988	29–Jul–91	26–Nov–91	08–Jul–92	2
C04A2	I–90 BMIP Tunnel and VB 6	179,784	2	12,531	0	192,315	15–Apr–92	30–Nov–91	31–Dec–94	4
C24A1	Operations Control Center Complex	7,525	2	524	0	8,049	15–Oct–92	12–Feb–93	26–Sep–94	3
C25A1	Remediation – South Boston Haul Road	1,632	1	114	0	1,746	19–Aug–91	17–Dec–91	16–Mar–92	1
	SUBTOTAL SOUTH BOSTON	423,728				453,262				
EAST BOSTON / ITT										
C05A1	I–90 Immersed Tube Tunnel	200,916	2	14,004	0	214,920	26–May–91	23–Sep–91	19–Mar–94	3
C05B1	I–90 Tunnel Finishes	51,398	2	3,582	0	54,980	01–May–92	23–Aug–92	31–Dec–94	3
C07A1	I–90 BIF Tunnel Including VB 7	276,544	4	19,275	0	295,819	30–Sep–91	30–Dec–91	25–Nov–94	4
C07B1	I–90 Porter Street Outfall Sewer Relocations	21,231	4	1,480	0	22,711	22–Aug–91	20–Dec–91	13–Apr–93	2
C07C1	I–90 East Boston Toll Plaza and Facilities	12,833	1	894	0	13,727	20–Jan–93	20–May–93	09–Dec–94	3
C07D1	Ramps E–T and T–AD	19,521	1	1,361	0	20,882	11–Jan–93	11–May–93	01–Nov–94	3
C07D2	Airport Interchange	37,972	1	2,647	0	40,619	05–Jul–94	02–Nov–94	24–Apr–96	2
C08A1	East Boston Airport Ramps	105,591	1	7,360	0	112,951	05–Oct–94	02–Feb–95	04–Jul–97	4
R05A2	Building Demolition, South Boston	1,831	1	128	0	1,959	16–Oct–90	04–Feb–91	05–Aug–91	2
R07A3	Demolition of Logan Airport Buildings	2,164	1	151	0	2,315	14–Nov–91	13–Jan–92	05–Jan–93	2
	SUBTOTAL EAST BOSTON/ITT	730,001				780,882				
SOUTH BAY										
C09A1	I–93/I–90 Interchange, I–93 NB Including VB 1	325,897	2	22,715	0	348,612	06–Aug–93	04–Dec–93	31–Dec–98	6
C09A2	Demolish Rapid Service Press Building	1,643	2	115	0	1,758	12–Sep–92	26–Apr–93	25–Oct–93	2
C09B1	Fort Point Channel Crossing	185,168	1	12,906	0	198,074	01–Feb–94	01–Jun–94	29–Aug–98	6
C09C1	I–93/I–90 Interchange, I–93 SB	161,918	1	11,286	0	173,204	01–Aug–94	29–Nov–94	02–Sep–98	5
C09D1	I–93/I–90 Interchange Surface Restoration	20,166	1	1,406	0	21,572	03–Sep–97	30–Dec–97	30–Dec–98	2
C09E1	Fort Point Channel Restoration	3,358	1	234	0	3,592	03–Sep–97	31–Dec–97	31–Dec–98	2
C09F1	SSTC Ramps	10,000				10,000	12–Sep–92	10–Jan–93	04–Apr–94	2
C10A1	I–93/I–90 Interchange RR Track Relocation	32,800	2	2,286	0	35,086	06–Aug–93	04–Dec–93	31–Dec–98	6
C12A1	Massachusetts Avenue Interchange	95,462	1	6,654	0	102,116	31–Oct–93	28–Feb–94	05–Dec–97	5
C13A1	South Boston Bypass Road	29,960	2	2,088	0	32,048	06–Oct–92	03–Feb–93	10–Nov–94	3
C14A1	New East Side Interceptor Relocation	24,293	3	1,693	0	25,986	18–Jun–92	18–Jul–92	08–Feb–94	2
	SUBTOTAL SOUTH BAY	890,665				952,047				
CENTRAL ARTERY										
C11A1	I–93 Northbound Tunnel (Atlantic Avenue)	194,337	2	13,545	0	207,882	13–Jun–93	11–Oct–93	21–Feb–97	4
C14B1	Utility Relocations – North to Causeway	31,089	3	2,167	0	33,256	19–May–92	18–Jul–92	19–Apr–94	2
C14C1	Utility Relocations – Congress to Broad	38,246	3	2,666	0	40,912	22–Jul–92	20–Sep–92	23–Apr–94	2
C14C2	Utility Relocations – Broad to North	45,156	3	3,147	0	48,303	29–May–92	28–Jul–92	20–Mar–94	2
C14C3	Relocation Of 30–Inch Gas Line	3,735	3	260	0	3,995	19–Jan–92	03–Apr–92	19–Nov–92	2
C15A1	I–93 Central Artery, North to Chardon	337,577	1	23,529	0	361,106	19–Feb–94	19–Jun–94	14–Nov–98	6
C15A2	I–93 Central Artery, Chardon To Causeway	140,166	1	9,770	0	149,936	22–Dec–93	21–Apr–94	04–Nov–98	6
C15A3	I–93 Central Artery, VB 4	0	1	0	0	0				
C15C1	I–93 Central Area Surface Area Restoration	13,017	1	907	0	13,924	23–May–95	20–Sep–95	22–Sep–99	5
C16A1	I–93 Parcel 7 Parking Structure	0	2	0	0	0	16–Jul–93	13–Nov–93	16–May–95	2
C17A1	I–93 Central Artery, High to Milk	226,719	2	15,802	0	242,521	24–Dec–93	23–Apr–94	18–Aug–98	6
C17A2	I–93 Central Artery, Milk to North	196,479	2	13,695	0	210,174	20–Nov–93	20–Mar–94	21–Feb–98	5

CA/T Construction Costs

Construction Contingency	7.0%
Overrun Contingency Factors	
Level 1 – 25% Design not Completed	13.0%
Level 2 – P/E Compl./25% Design Completed	11.0%
Level 3 – 75% Design Submitted	9.0%
Level 4 – PS&E Submitted	7.0%
Level 5 – Not Currently Used	5.0%
Complete	0.0%

Package	Description	Est. Proj. Cost 10/91 $'s	Level Of Engineering	Construction Contingency	Overrun Factor	Revised Total Cost	Early			
							Obligate	Start	Complete	Duration FY's
C17A3	I-93 Central Artery, VB 3	45,563	2	3,176	0	48,739	01-Jan-94	01-May-94	17-Mar-98	5
C17A6	I-93 Central Artery, SB Congress to High	101,372	2	7,066	0	108,438	04-Apr-97	02-Aug-97	25-Feb-2000	3
C17B1	I-93 Central Artery, MBTA Blue Line Crossing	23,352	2	1,628	0	24,980	15-Jul-93	12-Nov-93	15-Apr-95	2
C18A1	I-93 Central Artery, Summer To Congress	54,592	1	3,805	0	58,397	05-Apr-97	03-Aug-97	01-Mar-2000	3
C18B1	I-93 Dewey Square Transformers	405	4	28	0	433	14-May-91	11-Sep-91	13-Jul-92	2
C18C1	I-93 Central Artery, Summer To Kneeland	33,867	1	2,361	0	36,228	05-Apr-97	03-Aug-97	01-Mar-2000	3
	SUBTOTAL CENTRAL ARTERY	1,485,672				1,589,223				
CENTRAL ARTERY NORTH										
C19A1	I-93 CANA Loop Connectors	62,355	2	4,346	0	66,701	06-Jun-93	04-Oct-93	06-Apr-95	2
C19B1	I-93 Viaduct North of the Charles River	314,908	1	21,949	0	336,857	03-Mar-94	01-Jul-94	29-Jun-98	4
C19C1	Restore Charles River Basin	0	1	0	0	0	15-Apr-97	13-Aug-97	10-Aug-98	2
C19D1	Central Artery Bridges Over the Charles River	0	1	0	0	0	29-May-94	26-Sep-94	16-Oct-97	4
C19E1	Leverett Circle/Storrow Drive	0	1	0	0	0	27-Feb-94	27-Jun-94	17-Jan-97	4
C19F1	Charles River Basin Ferry and Wharf Facilities	0	1	0	0	0	15-Feb-94	15-Jun-94	16-Jun-95	2
C19G1	Charles River Tunnel/Tunnels North of River	0	1	0	0	0				
	SUBTOTAL CENTRAL ARTERY NORTH	377,263				403,558				
PROJECTWIDE										
C20A1	I-90 Furnish and Install Vent Fans	11,396	3	794	0	12,190	04-Apr-92	03-Jul-92	20-Nov-94	3
C20A2	I-90 Electrical General Contractor	24,081	3	1,678	0	25,759	04-Apr-92	03-Jul-92	20-Nov-94	3
C20B1	I-93 Furnish and Install Vent Fans	23,210	2	1,618	0	24,828	16-Sep-93	14-Jan-94	30-Dec-99	7
C20B2	I-93 Electrical General Contractor	61,749	2	4,304	0	66,053	16-Sep-93	14-Jan-94	30-Dec-99	7
C20C2	Tunnel Test Site Prep and Facility Mods	13,270	1	925	0	14,195	14-Aug-90	12-Dec-90	11-May-92	2
C20C8	Tunnel Test Fans, Instrumentation, Testing	13,270	1	925	0	14,195	16-Oct-91	13-Feb-92	23-May-93	2
C21A2	Materials Disposal System	125,445	2	8,744	0	134,189	02-Jun-92	31-Aug-92	31-May-97	5
C21B1	Materials Processing System	64,898	4	4,523	0	69,421	25-Sep-91	01-Oct-92	01-Oct-98	7
C21C1	Spectacle Island Surface Restoration	4,500	2	314	0	4,814	01-Jul-97	29-Oct-97	29-Oct-98	2
C22A1	I-90 Furnish and Install IPCS	56,993	2	3,972	0	60,965	06-Sep-92	04-Jan-93	30-Dec-94	3
C22A2	I-93 Furnish and Install IPCS	35,738	2	2,491	0	38,229	04-Oct-93	01-Feb-94	05-Dec-99	7
C22A3	Interim Control Center	1,852				1,852	21-May-92	27-Jul-92	05-Oct-93	2
C00B	Pest Control	3,134				3,134	01-May-91	30-Jul-91	04-Jun-99	8
	NET Interoffice Network Mods/Steam Plant Mods	17,582				17,582	08-Aug-91	08-Aug-91	08-Aug-91	1
	SUBTOTAL PROJECT WIDE	457,118				487,406				
	Totals	4,384,447				4,666,379				
	Cumulative Total									

CONFIDENTIAL -- PRELIMINARY DRAFT

CA/T Construction Costs

Construction Contingency
Overrun Contingency Factors
Level 1 – 25% Design not Completed
Level 2 – P/E Compl./25% Design Completed
Level 3 – 75% Design Submitted
Level 4 – PS&E Submitted
Level 5 – Not Currently Used
Complete

Package	Description	Late			Duration FY's	Funding Splits – %			
		Obligate	Start	Complete		Federal IC	Federal NON–IC	State/ Local	Total
SOUTH BOSTON									
C01A1	I–90 South Boston Interchange	02–Dec–93	01–Apr–94	01–Jan–99	6	90%		10%	100%
C01B1	Vent Building (VB) 5	02–Dec–95	31–Dec–96	01–Jan–99	3	90%		10%	100%
C02A1	South Boston Haul Road	16–Sep–91	14–Jan–92	01–Aug–93	3	36%	48%	16%	100%
C04A1	South Boston Railroad Relocation	29–Jul–91	26–Nov–91	08–Jul–92	2	90%		10%	100%
C04A2	I–90 BMIP Tunnel and VB 6	15–Apr–92	16–Jul–92	20–May–95	3	90%		10%	100%
C24A1	Operations Control Center Complex	21–Dec–92	20–May–93	01–Jan–95	3	90%		10%	100%
C25A1	Remediation – South Boston Haul Road	20–Jul–91	17–Dec–91	16–Mar–92	1	68%	20%	13%	101%
	SUBTOTAL SOUTH BOSTON								
EAST BOSTON / ITT									
C05A1	I–90 Immersed Tube Tunnel	26–May–91	23–Sep–91	19–Mar–94	3	90%		10%	100%
C05B1	I–90 Tunnel Finishes	01–May–92	23–Aug–92	01–Jan–95	3	90%		10%	100%
C07A1	I–90 BIF Tunnel Including VB 7	30–Sep–91	08–May–92	01–Jan–95	4	90%		10%	100%
C07B1	I–90 Porter Street Outfall Sewer Relocations	22–Aug–91	20–Dec–91	13–Apr–93	2	90%		10%	100%
C07C1	I–90 East Boston Toll Plaza and Facilities	20–Jan–93	11–Jun–93	01–Jan–95	3	90%		10%	100%
C07D1	Ramps E–T and T–AD	11–Jan–93	10–Jul–93	01–Jan–95	2	90%		10%	100%
C07D2	Airport Interchange	05–Jul–94	10–Jul–97	01–Jan–99	2	90%		10%	100%
C08A1	East Boston Airport Ramps	05–Oct–94	31–Jul–96	01–Jan–99	3		80%	20%	100%
R05A2	Building Demolition, South Boston	16–Oct–90		30–Jun–00		90%		10%	100%
R07A3	Demolition of Logan Airport Buildings					90%		10%	100%
	SUBTOTAL EAST BOSTON/ITT								
SOUTH BAY									
C09A1	I–93/I–90 Interchange, I–93 NB Including VB 1	06–Aug–93	04–Dec–93	06–Dec–96	4	90%		10%	100%
C09A2	Demolish Rapid Service Press Building	12–Sep–92				90%		10%	100%
C09B1	Fort Point Channel Crossing	01–Feb–94	03–Oct–94	01–Jan–96	2	90%		10%	100%
C09C1	I–93/I–90 Interchange, I–93 SB	01–Aug–94	08–Nov–95	01–Jan–99	4	90%		10%	100%
C09D1	I–93/I–90 Interchange Surface Restoration	03–Sep–97	01–Jan–98	01–Jan–99	2	90%		10%	100%
C09E1	Fort Point Channel Restoration	03–Sep–97	01–Jan–98	01–Jan–99	2	90%		10%	100%
C09F1	SSTC Ramps	12–Sep–92				90%		10%	100%
C10A1	I–93/I–90 Interchange RR Track Relocation	06–Aug–93	04–Dec–93	01–Jan–99	6	90%		10%	100%
C12A1	Massachusetts Avenue Interchange	31–Oct–93	28–Dec–94	02–Oct–98	5		80%	20%	100%
C13A1	South Boston Bypass Road	06–Oct–92	27–Mar–93	01–Jan–95	3		80%	20%	100%
C14A1	New East Side Interceptor Relocation	18–Jun–92	27–Oct–92	20–May–94	2	90%		10%	100%
	SUBTOTAL SOUTH BAY								
CENTRAL ARTERY									
C11A1	I–93 Northbound Tunnel (Atlantic Avenue)	13–Jun–93	20–Jan–94	02–Jun–97	4	90%		10%	100%
C14B1	Utility Relocations – North to Causeway	19–May–92	03–Jul–92	04–Apr–94	2		80%	20%	100%
C14C1	Utility Relocations – Congress to Broad	22–Jul–92	28–Jul–92	28–Feb–94	2	23%	60%	17%	100%
C14C2	Utility Relocations – Broad to North	29–May–92	08–Jul–92	28–Feb–94	2	23%	60%	17%	100%
C14C3	Relocation Of 30–Inch Gas Line	19–Jan–92	09–Feb–92	26–Sep–92	2	23%	60%	17%	100%
C15A1	I–93 Central Artery, North to Chardon	19–Feb–94	04–May–94	02–Jun–97	4		80%	20%	100%
C15A2	I–93 Central Artery, Chardon To Causeway	22–Dec–93	04–Apr–94	02–Jun–97	4		80%	20%	100%
C15A3	I–93 Central Artery, VB 4						80%	20%	100%
C15C1	I–93 Central Area Surface Area Restoration	23–May–95	29–Dec–95	31–Dec–99	5	45%	40%	15%	100%
C16A1	I–93 Parcel 7 Parking Structure	16–Jul–93	01–Dec–95	02–Jun–97	2		80%	20%	100%
C17A1	I–93 Central Artery, High to Milk	24–Dec–93	28–Feb–94	02–Jun–97	4		80%	20%	100%
C17A2	I–93 Central Artery, Milk to North	20–Nov–93	21–Mar–94	02–Jun–97	4		80%	20%	100%

CONFIDENTIAL -- PRELIMINARY DRAFT

CA/T Construction Costs

Construction Contingency
Overrun Contingency Factors
Level 1 – 25% Design not Completed
Level 2 – P/E Compl./25% Design Completed
Level 3 – 75% Design Submitted
Level 4 – PS&E Submitted
Level 5 – Not Currently Used
Complete

Package	Description	Late			Duration FY's	Funding Splits – %			
		Obligate	Start	Complete		Federal IC	Federal NON-IC	State/ Local	Total
C17A3	I-93 Central Artery, VB 3	01-Jan-94	12-Nov-94	02-Jun-97	3		80%	20%	100%
C17A6	I-93 Central Artery, SB Congress to High	04-Apr-97					80%	20%	100%
C17B1	I-93 Central Artery, MBTA Blue Line Crossing	15-Jul-93	04-Jul-95	04-Dec-96	2		80%	20%	100%
C18A1	I-93 Central Artery, Summer To Congress	05-Apr-97	02-Jun-97	02-Oct-98	3	90%		10%	100%
C18B1	I-93 Dewey Square Transformers	14-May-91	11-Sep-91	21-Jul-92	2	90%		10%	100%
C18C1	I-93 Central Artery, Summer To Kneeland	05-Apr-97	02-Jun-97	02-Oct-98	3	90%		10%	100%
	SUBTOTAL CENTRAL ARTERY								
CENTRAL ARTERY NORTH									
C19A1	I-93 CANA Loop Connectors	06-Jun-93	01-Dec-95	02-Jun-97	2	90%		10%	100%
C19B1	I-93 Viaduct North of the Charles River	03-Mar-94	30-Apr-94	02-Jun-97	4	90%		10%	100%
C19C1	Restore Charles River Basin	15-Apr-97	03-Jan-99	31-Dec-99	2	90%		10%	100%
C19D1	Central Artery Bridges Over the Charles River	29-May-94	13-Feb-95	02-Jun-97	3	90%		10%	100%
C19E1	Leverett Circle/Storrow Drive	27-Feb-94	10-Nov-94	02-Jun-97	3	90%		10%	100%
C19F1	Charles River Basin Ferry and Wharf Facilities	15-Feb-94	30-Dec-98	31-Dec-99	2	90%		10%	100%
C19G1	Charles River Tunnel/Tunnels North of River			24-Jan-03		90%		10%	100%
	SUBTOTAL CENTRAL ARTERY NORTH								
PROJECTWIDE									
C20A1	I-90 Furnish and Install Vent Fans	04-Apr-92	14-Aug-92	01-Jan-95	3	90%		10%	100%
C20A2	I-90 Electrical General Contractor	04-Apr-92	14-Aug-92	01-Jan-95	3	90%		10%	100%
C20B1	I-93 Furnish and Install Vent Fans	16-Sep-93	14-Jan-94	16-Feb-2001	8	68%	20%	13%	100%
C20B2	I-93 Electrical General Contractor	16-Sep-93	14-Jan-94	16-Feb-2001	8	68%	20%	13%	100%
C20C2	Tunnel Test Site Prep and Facility Mods	14-Aug-90	12-Dec-90	31-Mar-92	2	90%		10%	100%
C20C8	Tunnel Test Fans, Instrumentation, Testing	16-Oct-91	23-Nov-98	31-Mar-93	(5)	90%		10%	100%
C21A2	Materials Disposal System	02-Jun-92	30-May-99	03-Mar-2000	2	68%	20%	13%	100%
C21B1	Materials Processing System	25-Sep-91	31-Dec-92	01-Jan-99	7	68%	20%	13%	100%
C21C1	Spectacle Island Surface Restoration	01-Jul-97	04-Mar-99	03-Mar-2000	2	68%	20%	13%	100%
C22A1	I-90 Furnish and Install IPCS	06-Sep-92	06-Jan-93	01-Jan-95	3	90%		10%	100%
C22A2	I-93 Furnish and Install IPCS	04-Oct-93	26-Feb-94	13-Mar-2001	8	90%		10%	100%
C22A3	Interim Control Center	21-May-92				45%	40%	15%	100%
C008	Pest Control					68%	20%	13%	100%
	NET Interoffice Network Mods/Steam Plant Mods	08-Aug-91	08-Aug-91	08-Aug-91	1	80%		20%	
	SUBTOTAL PROJECT WIDE								
	Totals								
	Cumulative Total								

CA/T Construction Costs

Construction Contingency
Overrun Contingency Factors
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Package	Description	Spent Jul–85 Jun–91	Projected Costs by State Fiscal Year — — Inflated Dollars Jul–91 Jun–92	Jul–92 Jun–93	Jul–93 Jun–94	Jul–94 Jun–95	Jul–95 Jun–96	Jul–96 Jun–97	Jul–97 Jun–98	Jul–98 Jun–99	Jul–99 Jun–2000	Jun–2000 Jun–2001
SOUTH BOSTON												
C01A1	I–90 South Boston Interchange	0.0	0.0	0.0	39.0	40.3	41.7	43.2	44.7	46.3	0.0	0.0
C01B1	Vent Building (VB) 5	0.0	0.0	0.0	0.0	0.0	7.3	7.6	7.9	0.0	0.0	0.0
C02A1	South Boston Haul Road	0.0	3.9	4.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C04A1	South Boston Railroad Relocation	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C04A2	I–90 BMIP Tunnel and VB 6	0.0	48.1	49.8	51.5	53.3	0.0	0.0	0.0	0.0	0.0	0.0
C24A1	Operations Control Center Complex	0.0	0.0	2.8	2.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0
C25A1	Remediation – South Boston Haul Road	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BOSTON	0.0	54.7	57.6	97.5	96.6	49.1	50.8	52.6	46.3	0.0	0.0
EAST BOSTON / ITT												
C05A1	I–90 Immersed Tube Tunnel	0.0	71.6	74.1	76.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C05B1	I–90 Tunnel Finishes	0.0	0.0	19.0	19.6	20.3	0.0	0.0	0.0	0.0	0.0	0.0
C07A1	I–90 BIF Tunnel Including VB 7	0.0	74.0	76.5	79.2	82.0	0.0	0.0	0.0	0.0	0.0	0.0
C07B1	I–90 Porter Street Outfall Sewer Relocations	0.0	11.4	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C07C1	I–90 East Boston Toll Plaza and Facilities	0.0	0.0	4.7	4.9	5.1	0.0	0.0	0.0	0.0	0.0	0.0
C07D1	Ramps E–T and T–AD	0.0	0.0	7.2	7.5	7.7	0.0	0.0	0.0	0.0	0.0	0.0
C07D2	Airport Interchange	0.0	0.0	0.0	0.0	22.5	23.3	0.0	0.0	0.0	0.0	0.0
C08A1	East Boston Airport Ramps	0.0	0.0	0.0	0.0	31.3	32.4	33.5	34.7	0.0	0.0	0.0
R05A2	Building Demolition, South Boston	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R07A3	Demolition of Logan Airport Buildings	0.0	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL EAST BOSTON/ITT	1.0	159.1	194.5	188.0	168.9	55.7	33.5	34.7	0.0	0.0	0.0
SOUTH BAY												
C09A1	I–93/I–90 Interchange, I–93 NB Including VB 1	0.0	0.0	0.0	62.2	64.4	66.7	69.0	71.4	73.9	0.0	0.0
C09A2	Demolish Rapid Service Press Building	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C09B1	Fort Point Channel Crossing	0.0	0.0	0.0	35.4	36.6	37.9	39.2	40.6	42.0	0.0	0.0
C09C1	I–93/I–90 Interchange, I–93 SB	0.0	0.0	0.0	0.0	38.4	39.8	41.1	42.6	44.1	0.0	0.0
C09D1	I–93/I–90 Interchange Surface Restoration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	13.7	0.0	0.0
C09E1	Fort Point Channel Restoration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.3	0.0	0.0
C09F1	SSTC Ramps	0.0	0.0	5.2	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C10A1	I–93/I–90 Interchange RR Track Relocation	0.0	0.0	0.0	6.3	6.5	6.7	6.9	7.2	7.4	0.0	0.0
C12A1	Massachusetts Avenue Interchange	0.0	0.0	0.0	21.9	22.6	23.4	24.3	25.1	0.0	0.0	0.0
C13A1	South Boston Bypass Road	0.0	0.0	11.1	11.4	11.8	0.0	0.0	0.0	0.0	0.0	0.0
C14A1	New East Side Interceptor Relocation	0.0	0.0	13.4	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BAY	0.0	0.0	30.6	157.4	180.4	174.5	180.6	202.3	183.4	0.0	0.0
CENTRAL ARTERY												
C11A1	I–93 Northbound Tunnel (Atlantic Avenue)	0.0	0.0	0.0	55.7	57.6	59.6	61.7	0.0	0.0	0.0	0.0
C14B1	Utility Relocations – North to Causeway	0.0	0.0	17.2	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C14C1	Utility Relocations – Congress to Broad	0.0	0.0	21.2	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C14C2	Utility Relocations – Broad to North	0.0	0.0	25.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C14C3	Relocation Of 30–Inch Gas Line	0.0	2.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C15A1	I–93 Central Artery, North to Chardon	0.0	0.0	0.0	64.5	66.7	69.1	71.5	74.0	76.6	0.0	0.0
C15A2	I–93 Central Artery, Chardon To Causeway	0.0	0.0	0.0	26.8	27.7	28.7	29.7	30.7	31.8	0.0	0.0
C15A3	I–93 Central Artery, VB 4											
C15C1	I–93 Central Area Surface Area Restoration	0.0	0.0	0.0	0.0	0.0	3.2	3.3	3.4	3.5	3.7	0.0
C16A1	I–93 Parcel 7 Parking Structure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C17A1	I–93 Central Artery, High to Milk	0.0	0.0	0.0	43.3	44.8	46.4	48.0	49.7	51.4	0.0	0.0
C17A2	I–93 Central Artery, Milk to North	0.0	0.0	0.0	45.0	46.6	48.2	49.9	51.7	0.0	0.0	0.0

CA/T Construction Costs

Construction Contingency
Overrun Contingency Factors
Level 1 – 25% Design not Completed
Level 2 – P/E Compl./25% Design Completed
Level 3 – 75% Design Submitted
Level 4 – PS&E Submitted
Level 5 – Not Currently Used
Complete

Package	Description	Spent Jul–85 Jun–91	Projected Costs by State Fiscal Year –– Inflated Dollars Jul–91 Jun–92	Jul–92 Jun–93	Jul–93 Jun–94	Jul–94 Jun–95	Jul–95 Jun–96	Jul–96 Jun–97	Jul–97 Jun–98	Jul–98 Jun–99	Jul–99 Jun–2000	Jun–2000 Jun–2001
C17A3	I–93 Central Artery, VB 3	0.0	0.0	0.0	10.4	10.8	11.2	11.6	12.0	0.0	0.0	0.0
C17A6	I–93 Central Artery, SB Congress to High	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.4	46.0	47.6	0.0
C17B1	I–93 Central Artery, MBTA Blue Line Crossing	0.0	0.0	0.0	13.4	13.8	0.0	0.0	0.0	0.0	0.0	0.0
C18A1	I–93 Central Artery, Summer To Congress	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.9	24.8	25.6	0.0
C18B1	I–93 Dewey Square Transformers	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C18C1	I–93 Central Artery, Summer To Kneeland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8	15.4	15.9	0.0
	SUBTOTAL CENTRAL ARTERY	0.0	2.2	85.7	324.7	268.1	266.4	275.7	304.7	249.5	92.8	0.0
CENTRAL ARTERY NORTH												
C19A1	I–93 CANA Loop Connectors	0.0	0.0	0.0	35.7	37.0	0.0	0.0	0.0	0.0	0.0	0.0
C19B1	I–93 Viaduct North of the Charles River	0.0	0.0	0.0	0.0	93.4	96.6	100.0	103.5	0.0	0.0	0.0
C19C1	Restore Charles River Basin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C19D1	Central Artery Bridges Over the Charles River	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C19E1	Leverett Circle/Storrow Drive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C19F1	Charles River Basin Ferry and Wharf Facilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C19G1	Charles River Tunnel/Tunnels North of River											
	SUBTOTAL CENTRAL ARTERY NORTH	0.0	0.0	0.0	35.7	130.3	96.6	100.0	103.5	0.0	0.0	0.0
PROJECTWIDE												
C20A1	I–90 Furnish and Install Vent Fans	0.0	0.0	4.2	4.4	4.5	0.0	0.0	0.0	0.0	0.0	0.0
C20A2	I–90 Electrical General Contractor	0.0	0.0	8.9	9.2	9.5	0.0	0.0	0.0	0.0	0.0	0.0
C20B1	I–93 Furnish and Install Vent Fans	0.0	0.0	0.0	3.8	3.9	4.1	4.2	4.4	4.5	4.7	0.0
C20B2	I–93 Electrical General Contractor	0.0	0.0	0.0	10.1	10.5	10.8	11.2	11.6	12.0	12.4	0.0
C20C2	Tunnel Test Site Prep and Facility Mods	7.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C20C8	Tunnel Test Fans, Instrumentation, Testing	0.0	7.1	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C21A2	Materials Disposal System	0.0	0.0	27.8	28.7	29.8	30.8	31.9	0.0	0.0	0.0	0.0
C21B1	Materials Processing System	0.0	0.0	10.3	10.6	11.0	11.4	11.8	12.2	12.6	0.0	0.0
C21C1	Spectacle Island Surface Restoration	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.1	0.0	0.0
C22A1	I–90 Furnish and Install IPCS	0.0	0.0	21.0	21.8	22.5	0.0	0.0	0.0	0.0	0.0	0.0
C22A2	I–93 Furnish and Install IPCS	0.0	0.0	0.0	5.9	6.1	6.3	6.5	6.7	6.9	7.2	0.0
C22A3	Interim Control Center	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C00B	Pest Control	0.0	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.0	0.0
	NET Interoffice Network Mods/Steam Plant Mods	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL PROJECT WIDE	7.1	32.2	80.9	95.9	98.2	63.8	66.0	38.3	39.6	24.3	0.0
	Totals	8.1	248.2	429.3	899.1	942.6	706.1	706.6	736.1	518.8	117.1	0.0
	Cumulative Total	8.1	256.3	685.6	1,584.7	2,527.3	3,233.3	3,940.0	4,676.1	5,195.0	5,312.0	5,312.0

CONFIDENTIAL –– PRELIMINARY DRAFT

CA/T Federal IC Funding

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
SOUTH BOSTON														
001A	I-90 SOUTH BOSTON INTERCHANGE	226,797	239,597	0.0	3.2	38.1	38.5	36.3	37.6	38.9	40.2	41.7	0.0	0.0
001B	VENT BUILDING 5 SUPERSTRUCTURE	17,234	18,361	0.0	0.0	0.6	0.6	0.0	6.6	6.8	7.1	0.0	0.0	0.0
002A	SOUTH BOSTON HAUL ROAD	9,301	9,575	0.4	6.4	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
004A	I-90 BMIP TUNNEL	28,941	29,057	5.2	22.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04A2	I-90 BMIP Tunnel and VB 6	161,806	173,083	0.0	43.3	44.8	46.4	48.0	0.0	0.0	0.0	0.0	0.0	0.0
024A	SERVICE/ADMINISTRATION COMPLEX	9,777	10,249	0.0	1.5	4.1	2.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0
25A1	Remediation – South Boston Haul Road	1,110	1,167	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BOSTON	454,965	481,109	5.6	78.4	89.9	89.5	87.0	44.2	45.7	47.3	41.7	0.0	0.0
EAST BOSTON / ITT														
005A	I-90 IMMERSED TUBE TUNNEL	185,528	198,132	1.2	67.9	66.7	69.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
005B	I-90 TUNNEL FINISHES	48,350	51,574	2.1	0.0	17.1	17.7	18.3	0.0	0.0	0.0	0.0	0.0	0.0
007A	I-90 BIRD ISLAND FLATS (BIF)	276,787	294,134	12.7	81.7	68.9	71.3	73.8	0.0	0.0	0.0	0.0	0.0	0.0
007B	I-90 PORTER STREET OUTFALL SEWERS	22,107	23,439	2.5	10.7	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
007C	I-90 EAST BOSTON TOLL PLAZA AND FACILITIE	12,617	13,422	0.0	0.5	4.9	4.4	4.6	0.0	0.0	0.0	0.0	0.0	0.0
007D	AIRPORT INTERCHANGE	28,275	29,500	0.0	1.0	15.5	7.8	6.9	0.0	0.0	0.0	0.0	0.0	0.0
07D2	Airport Interchange	34,175	36,557	0.0	0.0	0.0	0.0	20.3	21.0	0.0	0.0	0.0	0.0	0.0
008A	EAST BOSTON AIRPORT/ROUTE 1A INTERCHAN	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05A2	Building Demolition, South Boston	1,648	1,763	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07A3	Demolition of Logan Airport Buildings	1,948	2,063	0.0	1.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL EAST BOSTON/ITT	611,435	650,605	19.5	163.8	184.7	170.3	123.9	21.0	0.0	0.0	0.0	0.0	0.0
SOUTH BAY														
009A	SOUTH BAY NB TUNNEL, WEST SHORE	344,681	365,125	0.0	36.6	7.6	63.9	58.0	60.0	62.1	64.3	66.5	0.0	0.0
09A2	Demolish Rapid Service Press Building	1,479	1,582	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009B	SOUTH BAY FORT POINT CHANNEL CROSSING	189,914	201,530	0.0	0.0	5.5	51.0	32.9	34.1	35.3	36.5	37.8	0.0	0.0
009C	SOUTH BAY, RANDOLPH TO KNEELAND STREET	163,136	173,293	0.0	0.0	5.6	7.0	40.6	35.8	37.0	38.3	39.7	0.0	0.0
009D	SOUTH BAY INTERSECTION RESTORATION	19,142	20,407	0.0	0.0	0.0	0.5	0.6	0.0	0.0	11.9	12.4	0.0	0.0
009E	FORT POINT CHANNEL RESTORATION	4,303	4,514	0.0	0.0	0.7	0.7	0.0	0.0	0.0	2.0	2.1	0.0	0.0
09F1	SSTC Ramps	9,000	9,000	0.0	0.0	4.7	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
010A	I-93 SOUTH BAY TEMPORARY BRIDGE UNDERP	36,365	38,422	0.0	6.8	0.0	5.6	5.8	6.0	6.3	6.5	6.7	0.0	0.0
012A	I-93 MASS AVENUE INTERCHANGE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
013A	SOUTH BOSTON BYPASS ROAD	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
014A	NEW EASTSIDE INTERCEPT RELOCATION	24,800	26,324	1.7	1.3	12.1	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BAY	792,820	840,196	1.7	44.8	37.0	147.0	137.9	135.9	140.7	159.5	165.1	0.0	0.0
CENTRAL ARTERY														
011A	I-93 ATLANTIC AVENUE	189,908	202,099	0.0	5.6	9.8	50.1	51.9	53.7	55.6	0.0	0.0	0.0	0.0
014B	I-93 CENTRAL ARTERY UTILITY RELOCATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
014C	I-93 CENTRAL ARTERY UTILITY RELOCATION	14,972	15,585	0.4	5.7	4.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14C2	Utility Relocations – Broad to North	10,386	11,110	0.0	0.0	5.7	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14C3	Relocation Of 30-Inch Gas Line	859	919	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015A	I-93 CENTRAL ARTERY, NORTH TO CAUSEWAY	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15A2	I-93 Central Artery, Chardon To Causeway	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15A3	I-93 Central Artery, VB 4	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015C	I 93 CENTRAL ARTERY SURFACE RESTORATIO	5,858	6,266	0.0	0.0	0.0	0.0	0.0	1.4	1.5	1.5	1.6	1.7	0.0
016A	PARCEL 7	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
017A	I 93 CENTRAL ARTERY CONGRESS TO NORTH	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17A2	I 93 Central Artery, Milk to North	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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17A3	I-93 Central Artery, VB 3	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17A6	I-93 Central Artery, SB Congress to High	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
017B	I-93 CENTRAL ARTERY, MBTA BLUE LINE CROS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
018A/C	I-93 DEWEY SQUARE TUNNEL	51,558	54,983	0.0	0.0	0.8	0.9	0.9	0.0	0.0	21.5	22.3	23.1	0.0
018B	I-93 DEWEY SQUARE TRANSFORMERS	365	390	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
018C	I-93 SUMMER TO KNEELAND	31,918	34,043	0.0	0.0	0.5	0.5	0.5	0.0	0.0	13.4	13.8	14.3	0.0
	SUBTOTAL CENTRAL ARTERY	305,824	325,394	0.4	12.0	22.4	62.5	53.3	55.1	57.0	36.4	37.7	39.0	0.0
CENTRAL ARTERY NORTH														
019A	I-93 CENTRAL ARTERY NORTH OF CAUSEWAY	80,868	84,780	0.0	2.0	23.5	32.2	33.3	0.0	0.0	0.0	0.0	0.0	0.0
019B	I-93 VIADUCTS AND RAMPS NORTH OF CHARL	302,816	322,570	0.0	0.0	10.0	10.4	84.0	87.0	90.0	93.2	0.0	0.0	0.0
019C	CHARLES RIVER BASIN RESTORATION	36	36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019D	CHARLES RIVER BRIDGES AND VIADUCTS	103	103	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019E	SCIENCE PARK UNDERPINNING	216	216	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019F	CHARLES RIVER BASIN FERRY/WHARF	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019G	CHARLES RIVER AND TUNNELS N. OF RIVER	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	384,039	407,705	0.0	2.0	33.7	42.7	117.3	87.0	90.0	93.2	0.0	0.0	0.0
PROJECTWIDE														
	Management Consultant/Preliminary Engineering	144,993	144,993	36.2	36.2	36.2	36.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Management Consultant/Construction Support	154,145	154,145	0.0	6.5	12.6	25.9	27.1	21.1	21.2	21.6	15.1	3.0	0.0
	Geotechnical Services	7,297	7,297	2.9	1.5	1.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020A	I-90 MECHANICAL/ELECTRICAL	14,971	15,685	2.4	2.4	3.8	3.9	4.1	0.0	0.0	0.0	0.0	0.0	0.0
20A2	I-90 Electrical General Contractor	21,673	23,184	0.0	0.0	8.0	8.3	8.6	0.0	0.0	0.0	0.0	0.0	0.0
020B	I-93 MECHANICAL/ELECTRICAL	23,331	24,423	2.6	2.6	2.6	2.6	2.7	2.7	2.8	2.9	3.0	3.2	0.0
20B2	I-93 Electrical General Contractor	41,681	44,586	0.0	0.0	0.0	6.8	7.1	7.3	7.6	7.8	8.1	8.4	0.0
20C2	Tunnel Test Site Prep and Facility Mods	11,943	12,775	6.4	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20C8	Tunnel Test Fans, Instrumentation, Testing	11,943	12,775	0.0	6.4	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
021A	MATERIALS DISPOSAL SYSTEM	90,064	95,966	0.0	3.4	20.8	19.4	20.1	20.8	21.5	0.0	0.0	0.0	0.0
021B	MATERIALS PROCESSING SYSTEM	55,785	58,839	0.0	12.0	6.9	7.2	7.4	7.7	8.0	8.2	8.5	0.0	0.0
021C	SPECTACLE ISLAND SURFACE RESTORATION	3,853	4,064	0.0	0.0	0.4	0.4	0.0	0.0	0.0	2.0	2.1	0.0	0.0
022A	INTEGRATED PROJECT CONTROLS (IPCS)	62,903	66,478	2.9	2.9	21.9	22.7	20.3	0.0	0.0	0.0	0.0	0.0	0.0
22A2	I-93 Furnish and Install IPCS	32,164	34,406	0.0	0.0	0.0	5.3	5.4	5.6	5.8	6.0	6.3	6.5	0.0
22A3	Interim Control Center	833	833	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
00B	Pest Control	2,115	2,115	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0
025A	ASSESSMENT AND REMEDIATION	6,104	6,104	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	NET Interoffice Network Mods/Steam Plant Mods	14,066	14,066	0.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025C	PROJECT CONSERVATOR – 3RD WORK PROGR	38	38	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025D	PROJECT CONSERVATOR – 2ND WORK PROGR	981	981	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025E	PHASE III ARCHAEOLOGY – I-93/I-90	1,742	1,742	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025F	HABS/HAER DOCUMENTATION	900	900	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
025G	PHASE III ARCHAEOLOGY – MATERIALS DISPOS	99	99	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025H	PROJECT CONSERVATOR – 3RD WORK PROGR	944	944	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
025S	PROJECTWIDE SAFETY CONSULTANT	3,480	3,480	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025T	PUBLIC INFORMATION CONTRACT	1,350	1,350	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL PROJECT WIDE	709,398	732,267	60.7	101.0	122.3	141.9	104.0	65.6	67.2	49.0	49.4	21.0	0.0
	Totals	3,258,478	3,437,275	87.9	402.0	490.0	653.9	623.3	408.8	400.6	385.4	287.9	60.1	0.0
	Cumulative Totals			87.9	489.9	979.9	1,633.8	2,257.1	2,665.9	3,066.5	3,451.9	3,739.8	3,799.9	3,799.9

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SOUTH BOSTON														
001A	I-90 SOUTH BOSTON INTERCHANGE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
001B	VENT BUILDING 5 SUPERSTRUCTURE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
002A	SOUTH BOSTON HAUL ROAD	12,401	12,767	0.5	8.5	1.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
004A	I-90 BMIP TUNNEL	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04A2	I-90 BMIP Tunnel and VB 6	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
024A	SERVICE/ADMINISTRATION COMPLEX	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25A1	Remediation -- South Boston Haul Road	326	349	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BOSTON	12,727	13,116	0.5	8.9	1.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EAST BOSTON / ITT														
005A	I-90 IMMERSED TUBE TUNNEL	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
005B	I-90 TUNNEL FINISHES	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
007A	I-90 BIRD ISLAND FLATS (BIF)	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
007B	I-90 PORTER STREET OUTFALL SEWERS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
007C	I-90 EAST BOSTON TOLL PLAZA AND FACILITIE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
007D	AIRPORT INTERCHANGE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07D2	Airport Interchange	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
006A	EAST BOSTON AIRPORT/ROUTE 1A INTERCHAN	121,132	127,020	0.0	32.0	1.6	1.7	26.8	25.9	26.8	27.8	0.0	0.0	0.0
05A2	Building Demolition, South Boston	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07A3	Demolition of Logan Airport Buildings	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL EAST BOSTON/ITT	121,132	127,020	0.0	32.0	1.6	1.7	26.8	25.9	26.8	27.8	0.0	0.0	0.0
SOUTH BAY														
009A	SOUTH BAY NB TUNNEL, WEST SHORE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09A2	Demolish Rapid Service Press Building	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009B	SOUTH BAY FORT POINT CHANNEL CROSSING	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009C	SOUTH BAY, RANDOLPH TO KNEELAND STREET	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009D	SOUTH BAY INTERSECTION RESTORATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009E	FORT POINT CHANNEL RESTORATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09F1	SSTC Ramps	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
010A	I-93 SOUTH BAY TEMPORARY BRIDGE UNDERF	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
012A	I-93 MASS AVENUE INTERCHANGE	91,781	97,104	0.0	0.0	13.8	19.8	18.1	18.7	19.4	20.1	0.0	0.0	0.0
013A	SOUTH BOSTON BYPASS ROAD	34,901	36,572	0.0	1.5	18.6	9.2	9.5	0.0	0.0	0.0	0.0	0.0	0.0
014A	NEW EASTSIDE INTERCEPT RELOCATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BAY	126,682	133,675	0.0	1.5	32.4	28.9	27.6	18.7	19.4	20.1	0.0	0.0	0.0
CENTRAL ARTERY														
011A	I-93 ATLANTIC AVENUE	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
014B	I-93 CENTRAL ARTERY UTILITY RELOCATION	42,136	43,870	1.0	16.2	13.8	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
014C	I-93 CENTRAL ARTERY UTILITY RELOCATION	39,057	40,656	1.2	15.0	12.7	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14C2	Utility Relocations -- Broad to North	27,094	28,962	0.0	0.0	15.0	15.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14C3	Relocation Of 30-Inch Gas Line	2,241	2,397	0.0	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015A	I-93 CENTRAL ARTERY, NORTH TO CAUSEWAY	287,160	305,983	0.0	5.7	5.9	57.7	53.4	55.3	57.2	59.2	61.3	0.0	0.0
15A2	I-93 Central Artery, Chardon To Causeway	112,133	119,948	0.0	0.0	0.0	21.4	22.2	22.9	23.7	24.6	25.4	0.0	0.0
15A3	I-93 Central Artery, VB 4	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015C	I-93 CENTRAL ARTERY SURFACE RESTORATIO	6,235	6,598	0.0	0.0	0.5	0.6	0.0	1.3	1.3	1.4	1.4	1.5	0.0
016A	PARCEL 7	2,560	2,560	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
017A	I-93 CENTRAL ARTERY, CONGRESS TO NORTH	201,974	214,616	5.1	5.1	5.3	40.2	35.9	37.1	38.4	39.7	41.1	0.0	0.0
17A2	I-93 Central Artery, Milk to North	157,183	168,139	0.0	0.0	0.0	36.0	37.3	38.6	39.9	41.3	0.0	0.0	0.0

CA/T Federal NON IC Funding

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
17A3	I-93 Central Artery, VB 3	36,450	38,991	0.0	0.0	0.0	8.4	8.6	8.9	9.3	9.6	0.0	0.0	0.0
17A6	I-93 Central Artery, SB Congress to High	81,096	86,750	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.5	36.8	38.1	0.0
017B	I-93 CENTRAL ARTERY, MBTA BLUE LINE CROS	21,046	22,346	0.0	0.0	0.0	10.7	11.1	0.0	0.0	0.0	0.0	0.0	0.0
018A/C	I-93 DEWEY SQUARE TUNNEL	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
018B	I-93 DEWEY SQUARE TRANSFORMERS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
018C	I-93 SUMMER TO KNEELAND	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY	1,016,386	1,081,839	7.3	44.5	55.8	217.8	166.4	164.1	169.9	211.3	166.0	39.5	0.0
CENTRAL ARTERY NORTH														
019A	I-93 CENTRAL ARTERY NORTH OF CAUSEWAY	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019B	I-93 VIADUCTS AND RAMPS NORTH OF CHARL	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019C	CHARLES RIVER BASIN RESTORATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019D	CHARLES RIVER BRIDGES AND VIADUCTS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019E	SCIENCE PARK UNDERPINNING	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019F	CHARLES RIVER BASIN FERRY/WHARF	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019G	CHARLES RIVER AND TUNNELS N. OF RIVER	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PROJECTWIDE														
	Management Consultant/Preliminary Engineering	68,810	68,810	17.2	17.2	17.2	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Management Consultant/Construction Support	73,153	73,153	0.0	3.1	6.0	12.3	12.9	10.0	10.0	10.3	7.2	1.4	0.0
	Geotechnical Services	6,486	6,486	2.6	1.3	1.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020A	I-90 MECHANICAL/ELECTRICAL	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20A2	I-90 Electrical General Contractor	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020B	I-93 MECHANICAL/ELECTRICAL	6,896	7,220	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.0
20B2	I-93 Electrical General Contractor	12,350	13,211	0.0	0.0	0.0	2.0	2.1	2.2	2.2	2.3	2.4	2.5	0.0
20C2	Tunnel Test Site Prep and Facility Mode	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20C8	Tunnel Test Fans, Instrumentation, Testing	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
021A	MATERIALS DISPOSAL SYSTEM	26,686	28,434	0.0	1.0	6.2	5.7	6.0	6.2	6.4	0.0	0.0	0.0	0.0
021B	MATERIALS PROCESSING SYSTEM	16,529	17,434	0.0	3.5	2.1	2.1	2.2	2.3	2.4	2.4	2.5	0.0	0.0
021C	SPECTACLE ISLAND SURFACE RESTORATION	1,142	1,204	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.6	0.6	0.0	0.0
022A	INTEGRATED PROJECT CONTROLS (IPCS)	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22A2	I-93 Furnish and Install IPCS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22A3	Interim Control Center	741	741	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
00B	Pest Control	627	627	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
025A	ASSESSMENT AND REMEDIATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	NET Interoffice Network Mode/Steam Plant Mode	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025C	PROJECT CONSERVATOR - 3RD WORK PROGR	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025D	PROJECT CONSERVATOR - 2ND WORK PROGR	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025E	PHASE III ARCHAEOLOGY - I-93/I-90	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025F	HABS/HAER DOCUMENTATION	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025G	PHASE III ARCHAEOLOGY - MATERIALS DISPOS	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025H	PROJECT CONSERVATOR - 3RD WORK PROGR	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025S	PROJECTWIDE SAFETY CONSULTANT	1,031	1,031	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025T	PUBLIC INFORMATION CONTRACT	400	400	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL PROJECT WIDE	214,851	218,751	20.6	28.4	34.1	42.1	24.0	21.5	22.0	16.6	13.7	4.9	0.0
	Totals	1,491,759	1,574,401	28.4	115.2	125.9	292.5	246.8	230.3	238.0	275.8	179.7	44.4	0.0
	Cumulative Totals			28.4	143.6	269.5	562.0	808.8	1,039.1	1,277.2	1,552.9	1,732.7	1,777.1	1,777.1

CONFIDENTIAL -- PRELIMINARY DRAFT

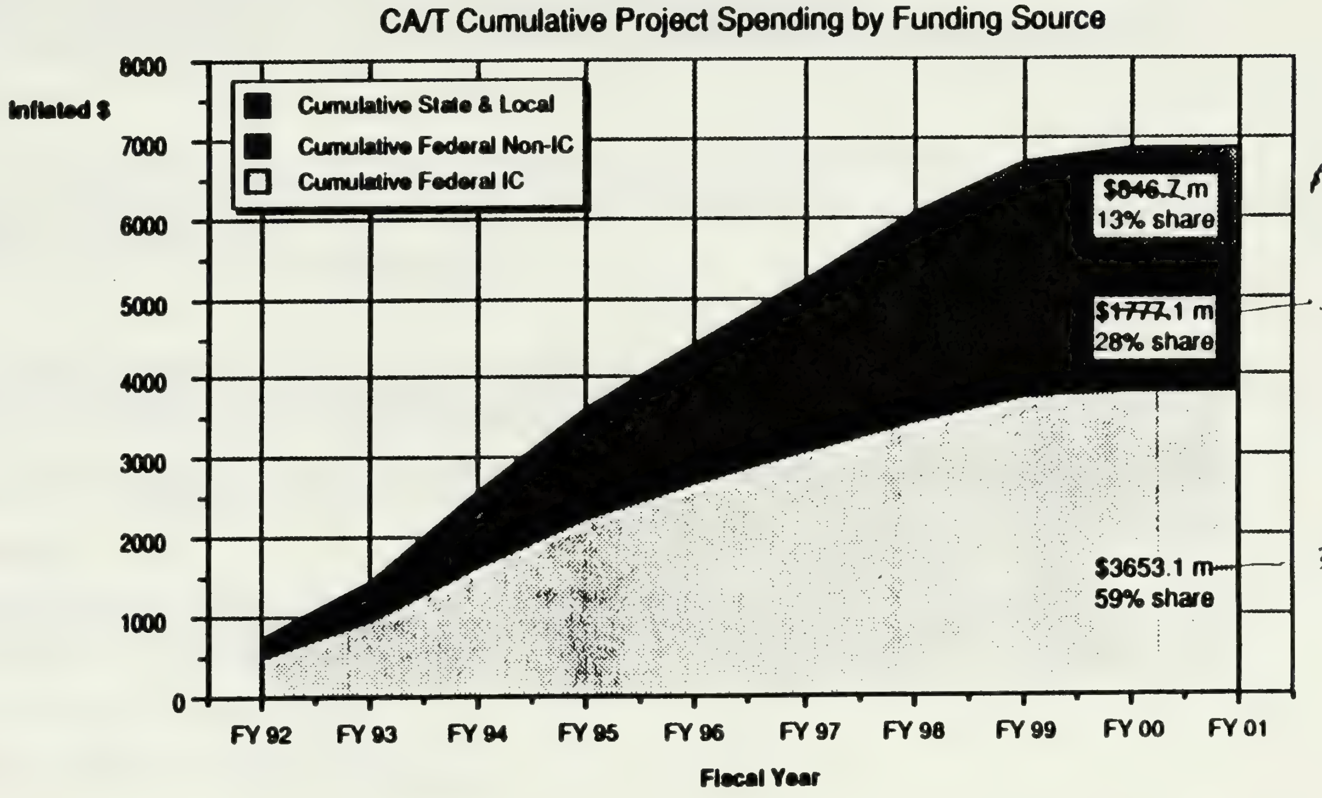
CA/T State & Local Funding

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
SOUTH BOSTON														
001A	I-90 SOUTH BOSTON INTERCHANGE	25,200	26,622	0.0	0.4	4.2	4.3	4.0	4.2	4.3	4.5	4.6	0.0	0.0
001B	VENT BUILDING 5 SUPERSTRUCTURE	1,915	2,040	0.0	0.0	0.1	0.1	0.0	0.7	0.8	0.8	0.0	0.0	0.0
002A	SOUTH BOSTON HAUL ROAD	4,134	4,256	0.2	2.8	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
004A	I-90 BMIP TUNNEL	3,216	3,229	0.6	2.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04A2	I-90 BMIP Tunnel and VB 6	17,978	19,231	0.0	4.8	5.0	5.2	5.3	0.0	0.0	0.0	0.0	0.0	0.0
024A	SERVICE/ADMINISTRATION COMPLEX	1,066	1,139	0.0	0.2	0.5	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
25A1	Remediation - South Boston Haul Road	212	227	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BOSTON	53,741	56,743	0.8	10.9	10.5	10.4	9.7	4.9	5.1	5.3	4.6	0.0	0.0
EAST BOSTON / ITT														
005A	I-90 IMMERSED TUBE TUNNEL	20,614	22,015	0.1	7.5	7.4	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
005B	I-90 TUNNEL FINISHES	5,372	5,730	0.2	0.0	1.9	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
007A	I-90 BIRD ISLAND FLATS (BIF)	30,754	32,682	1.4	9.1	7.7	7.9	8.2	0.0	0.0	0.0	0.0	0.0	0.0
007B	I-90 PORTER STREET OUTFALL SEWERS	2,456	2,604	0.3	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
007C	I-90 EAST BOSTON TOLL PLAZA AND FACILITIE	1,402	1,491	0.0	0.1	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
007D	AIRPORT INTERCHANGE	3,142	3,278	0.0	0.1	1.7	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0
07D2	Airport Interchange	3,797	4,062	0.0	0.0	0.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0
008A	EAST BOSTON AIRPORT/ROUTE 1A INTERCHAN	30,283	31,755	0.0	8.0	0.4	0.4	6.7	6.5	6.7	6.9	0.0	0.0	0.0
05A2	Building Demolition, South Boston	183	196	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07A3	Demolition of Logan Airport Buildings	216	231	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL EAST BOSTON/ITT	98,220	104,044	2.2	26.2	20.9	19.3	20.5	8.8	6.7	6.9	0.0	0.0	0.0
SOUTH BAY														
009A	SOUTH BAY NB TUNNEL, WEST SHORE	38,298	40,569	0.0	4.1	0.8	7.1	6.4	6.7	6.9	7.1	7.4	0.0	0.0
09A2	Demolish Rapid Service Press Building	164	176	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009B	SOUTH BAY FORT POINT CHANNEL CROSSING	21,102	22,392	0.0	0.0	0.6	5.7	3.7	3.8	3.9	4.1	4.2	0.0	0.0
009C	SOUTH BAY, RANDOLPH TO KNEELAND STREET	18,126	19,255	0.0	0.0	0.6	0.8	4.5	4.0	4.1	4.3	4.4	0.0	0.0
009D	SOUTH BAY INTERSECTION RESTORATION	2,127	2,267	0.0	0.0	0.0	0.1	0.1	0.0	0.0	1.3	1.4	0.0	0.0
009E	FORT POINT CHANNEL RESTORATION	478	502	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.0
09F1	SSTC Ramps	1,000	1,000	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
010A	I-93 SOUTH BAY TEMPORARY BRIDGE UNDERP	4,041	4,269	0.0	0.8	0.0	0.6	0.6	0.7	0.7	0.7	0.7	0.0	0.0
012A	I-93 MASS AVENUE INTERCHANGE	22,945	24,276	0.0	0.0	3.4	4.9	4.5	4.7	4.9	5.0	0.0	0.0	0.0
013A	SOUTH BOSTON BYPASS ROAD	8,725	9,143	0.0	0.4	4.7	2.3	2.4	0.0	0.0	0.0	0.0	0.0	0.0
014A	NEW EASTSIDE INTERCEPT RELOCATION	2,756	2,925	0.2	0.1	1.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL SOUTH BAY	119,762	126,774	0.2	5.3	12.2	23.6	22.2	19.8	20.5	22.7	18.3	0.0	0.0
CENTRAL ARTERY														
011A	I-93 ATLANTIC AVENUE	21,101	22,455	0.0	0.6	1.1	5.6	5.8	6.0	6.2	0.0	0.0	0.0	0.0
014B	I-93 CENTRAL ARTERY UTILITY RELOCATION	10,534	10,967	0.3	4.1	3.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
014C	I-93 CENTRAL ARTERY UTILITY RELOCATION	11,066	11,519	0.3	4.2	3.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14C2	Utility Relocations - Broad to North	7,677	8,212	0.0	0.0	4.2	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14C3	Relocation Of 30-Inch Gas Line	635	679	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015A	I-93 CENTRAL ARTERY, NORTH TO CAUSEWAY	71,790	76,496	0.0	1.4	1.5	14.4	13.3	13.8	14.3	14.8	15.3	0.0	0.0
15A2	I-93 Central Artery, Chardon To Causeway	28,033	29,987	0.0	0.0	0.0	5.4	5.5	5.7	5.9	6.1	6.4	0.0	0.0
15A3	I-93 Central Artery, VB 4	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015C	I-93 CENTRAL ARTERY SURFACE RESTORATIO	2,210	2,346	0.0	0.0	0.1	0.1	0.0	0.5	0.5	0.5	0.5	0.6	0.0
016A	PARCEL 7	640	640	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
017A	I-93 CENTRAL ARTERY, CONGRESS TO NORTH	50,494	53,654	1.3	1.3	1.3	10.0	9.0	9.3	9.6	9.9	10.3	0.0	0.0
17A2	I-93 Central Artery, Milk to North	39,296	42,035	0.0	0.0	0.0	9.0	9.3	9.6	10.0	10.3	0.0	0.0	0.0

CA/T State & Local Funding

Package	Description	Est. Proj. Cost 10/91 $'s	Revised Total Cost	Spent Prior to SFY 1992	Projected Costs by State Fiscal Year -- Inflated Dollars									
					Jul-91 Jun-92	Jul-92 Jun-93	Jul-93 Jun-94	Jul-94 Jun-95	Jul-95 Jun-96	Jul-96 Jun-97	Jul-97 Jun-98	Jul-98 Jun-99	Jul-99 Jun-2000	Jun-2000 Jun-2001
17A3	I-93 Central Artery, VB 3	9,113	9,748	0.0	0.0	0.0	2.1	2.2	2.2	2.3	2.4	0.0	0.0	0.0
17A6	I-93 Central Artery, SB Congress to High	20,274	21,688	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	9.2	9.5	0.0
017B	I-93 CENTRAL ARTERY, MBTA BLUE LINE CROS	5,261	5,587	0.0	0.0	0.0	2.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0
018A/C	I-93 DEWEY SQUARE TUNNEL	5,729	6,109	0.0	0.0	0.1	0.1	0.1	0.0	0.0	2.4	2.5	2.6	0.0
018B	I-93 DEWEY SQUARE TRANSFORMERS	41	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
018C	I-93 SUMMER TO KNEELAND	3,546	3,783	0.0	0.0	0.1	0.1	0.1	0.0	0.0	1.5	1.5	1.6	0.0
	SUBTOTAL CENTRAL ARTERY	287,436	305,948	1.9	12.3	18.2	81.1	48.0	47.2	48.8	56.9	45.7	14.2	0.0
CENTRAL ARTERY NORTH														
019A	I-93 CENTRAL ARTERY NORTH OF CAUSEWAY	8,985	9,420	0.0	0.2	2.6	3.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0
019B	I-93 VIADUCTS AND RAMPS NORTH OF CHARL	33,646	35,841	0.0	0.0	1.1	1.2	9.3	9.7	10.0	10.4	0.0	0.0	0.0
019C	CHARLES RIVER BASIN RESTORATION	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019D	CHARLES RIVER BRIDGES AND VIADUCTS	11	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019E	SCIENCE PARK UNDERPINNING	24	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019F	CHARLES RIVER BASIN FERRY/WHARF	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019G	CHARLES RIVER AND TUNNELS N. OF RIVER	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL CENTRAL ARTERY NORTH	42,671	45,301	0.0	0.2	3.7	4.7	13.0	9.7	10.0	10.4	0.0	0.0	0.0
PROJECTWIDE														
	Management Consultant/Preliminary Engineering	31,948	31,948	8.0	8.0	8.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Management Consultant/Construction Support	33,984	33,984	0.0	1.4	2.8	5.7	6.0	4.7	4.7	4.8	3.3	0.7	0.0
	Geotechnical Services	2,432	2,432	1.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
020A	I-90 MECHANICAL/ELECTRICAL	1,663	1,743	0.3	0.3	0.4	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
20A2	I-90 Electrical General Contractor	2,408	2,576	0.0	0.0	0.9	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
020B	I-93 MECHANICAL/ELECTRICAL	4,368	4,569	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.0
20B2	I-93 Electrical General Contractor	7,719	8,257	0.0	0.0	0.0	1.3	1.3	1.4	1.4	1.4	1.5	1.6	0.0
20C2	Tunnel Test Site Prep and Facility Mods	1,327	1,419	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20C8	Tunnel Test Fans, Instrumentation, Testing	1,327	1,419	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
021A	MATERIALS DISPOSAL SYSTEM	16,679	17,772	0.0	0.8	3.9	3.6	3.7	3.8	4.0	0.0	0.0	0.0	0.0
021B	MATERIALS PROCESSING SYSTEM	10,331	10,896	0.0	2.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	0.0	0.0
021C	SPECTACLE ISLAND SURFACE RESTORATION	713	753	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.4	0.4	0.0	0.0
022A	INTEGRATED PROJECT CONTROLS (IPCS)	6,989	7,386	0.3	0.3	2.4	2.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0
22A2	I-93 Furnish and Install IPCS	3,574	3,823	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.0
22A3	Interim Control Center	278	278	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
00B	Pest Control	392	392	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
025A	ASSESSMENT AND REMEDIATION	678	678	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	NET Interoffice Network Mods/Steam Plant Mods	3,516	3,516	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025C	PROJECT CONSERVATOR – 3RD WORK PROGR	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025D	PROJECT CONSERVATOR – 2ND WORK PROGR	109	109	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025E	PHASE III ARCHAEOLOGY – I-93/I-90	194	194	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025F	HABS/HAER DOCUMENTATION	100	100	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
025G	PHASE III ARCHAEOLOGY – MATERIALS DISPOS	11	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025H	PROJECT CONSERVATOR – 3RD WORK PROGR	105	105	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
025S	PROJECTWIDE SAFETY CONSULTANT	645	645	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025T	PUBLIC INFORMATION CONTRACT	250	250	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL PROJECT WIDE	131,721	135,238	11.8	19.9	21.7	25.7	17.3	12.5	12.8	9.4	8.1	3.5	0.0
	Totals	733,554	774,047	16.5	74.9	85.2	144.9	130.7	102.8	103.8	111.6	76.8	17.7	0.0
	Cumulative Totals			16.5	91.4	176.6	321.6	452.3	555.1	658.9	770.5	847.2	865.0	865.0

The State and Local share of total project cost is currently projected to be 13%



$1,298 19%

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26%

3,800 55%

Deloitte & Touche

MBTA Financial Model – Assumptions

DRAFT

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A. Operating Data

SOURCES: Historical operating data from Maureen Burke (Treasury). Projected operating data for FY 92 and FY 93 from Bobby Kuo.

1. Sources of Funds – Assumptions

- In general, sources of funds were projected using their average annual growth rates over the period FY 86 through FY 93.
- Inflation rates will remain generally similar to those experienced during the period FY 86 through FY 93.
- Ridership will gradually increase during the '90s due to traffic congestion attendant upon the CA/T project.
- The MBTA will not receive contract assistance for debt service beginning FY 93. The debt will either be refunded or served by another entity.
- Federal operating assistance will remain flat.

2. Uses of Funds – Assumptions

- In general, uses of funds were projected using their average annual growth rates over the period FY 86 through FY 93.
- Inflation rates will remain generally similar to those experienced during the period FY 86 through FY 93.
- The MBTA will not expend operating funds for debt service beginning FY 93. The debt will either be refunded or served by another entity.
- The MBTA will go to "forward funding" in FY 93.
- Lease payments will be counted as an operating expense starting FY 93.

B. Capital Program

SOURCES: Committed capital spending, Five Year Plan data, capital reimbursement assumptions and data from Jim Scanlin and Peter Butler.
Recapitalization estimate vehicle assumptions and data from Tom Furmaniak and Jim Monahan.
Recapitalization estimate plant assumptions and data from Bobby Kuo's life cycle model.

1. The MBTA arrived at committed capital spending (broken into local and Federal components) by checking unexpended, committed fund balances, listing the projects involved, and projecting spendout to complete the committed projects.

2. Federal funding assumptions

- 50% Federal funding for full build of Old Colony ($560 million total cost), no STP funding
- 80% Federal funding for full build of South Boston Transitway ($522.8 million total cost)
- Federal reimbursement flow will track with project spending cash flow

3. Curve Codes (see attached page for spending curve table):

- Code 1 through 10: flat spending, 1 yr. through 10 yr. periods
- Code 11 through 20: curved spending, 1 yr. through 10 yr. periods

4. Recapitalization estimate:

- Replacement spending pattern is curved, overhaul spending pattern is flat
- Overhaul cost=50% of replacement cost
- 25 year life on all subway light/heavy rail cars, Red/Green receive 1 mid–life overhaul
- Orange/Blue vehicles receive rehabilitation on an as needed basis over last 10 years of useful life; no fleet mid–life overhaul contemplated
- 18 locomotives have 30 year life; first 10–year overhaul completed, 1 remaining at 20 year mark
- 25 locomotives have 30 year life; 2 overhauls at 10 year intervals
- 9 remanufactured locomotives have 20 year life, 1 mid–life overhaul
- Coaches have 25 year life, 1 mid–life overhaul
- Existing plant recapitalization requirements estimated on an annual basis, based on B. Kuo's life cycle model

EOTC Financial Model
Assumptions Worksheet

Inflation

Inflation Flag 0 (0=off,1=on)

	Historical Years				Base Year	Projected Years									
1992 Base Year	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Capital															
Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Factor	0.87	0.90	0.93	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Operating															
Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Factor	0.87	0.90	0.93	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

EOTC Financial Model
Assumptions Worksheet

Project Spending Curve Table

Note: Unshaded=flat spending, Shaded=curved spending

PROJECT DURATION	CURVE CODE	PROJECT YEAR 1	2	3	4	5	6	7	8	9	10	TOTAL
1	1	100%										100%
2	2	50%	50%									100%
3	3	34%	33%	33%								100%
4	4	25%	25%	25%	25%							100%
5	5	20%	20%	20%	20%	20%						100%
6	6	17%	17%	17%	17%	17%	17%					100%
7	7	14%	14%	14%	14%	14%	14%	14%				100%
8	8	13%	13%	13%	13%	13%	13%	13%	13%			100%
9	9	11%	11%	11%	11%	11%	11%	11%	11%	11%		100%
10	10	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	100%
1	11	100%										100%
2	12	50%	50%									100%
3	13	34%	33%	33%								100%
4	14	10%	40%	40%	10%							100%
5	15	5%	15%	25%	40%	15%						100%
6	16	5%	10%	15%	20%	35%	15%					100%
7	17	4%	6%	10%	15%	20%	30%	15%				100%
8	18	3%	5%	9%	12%	13%	18%	28%	12%			100%
9	19	2%	4%	8%	10%	11%	15%	18%	22%	10%		100%
10	20	1%	3%	7%	8%	10%	13%	15%	16%	19%	8%	100%

MBTA Cash Flow Summary

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Baseline Scenario Assumptions

1 Capital Spending projection is in constant (FY 92) dollars

2 MITA refunds all long term debt in FY 93, MBTA goes to "forward funding" in FY 93

	Historical Data						Projected Data										
	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
OPERATIONS (Nominal $)																	
Source of Funds																	
Local																	
Fares	104.8	108.6	112.2	114.5	127.5	123.4	132.4	138.3	144.0	149.9	156.1	162.6	169.3	176.2	183.5	191.1	198.9
Local Property Tax Assessment	107.5	110.2	112.9	115.7	118.6	121.6	124.6	127.8	131.0	134.2	137.6	141.0	144.6	148.2	151.9	155.7	159.6
Intra-Agency Transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest Earnings/Investment Income	11.2	9.4	12.6	5.4	11.1	5.4	3.5	3.2	3.1	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2
Other Operating Revenue	7.2	6.0	7.2	7.3	10.9	12.0	12.5	13.0	14.3	15.8	17.5	19.3	21.3	23.5	25.9	28.6	31.6
Subtotal Local Funds	230.7	234.1	245.0	243.0	268.1	262.4	273.0	282.3	292.4	302.9	314.0	325.6	337.7	350.4	363.7	377.6	392.3
State																	
MTA Debt (Contract Assistance)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MBTA Bonds (Contract Assitance)	62.3	66.9	76.1	86.6	102.3	121.1	146.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Railroad (Contract Assistance)	8.7	9.6	10.6	9.0	9.4	12.7	12.9	13.3	14.2	15.3	16.3	17.5	18.8	20.1	21.5	23.0	24.7
Operating Reimbursement	145.2	161.4	182.7	215.6	228.4	271.1	287.3										
Subtotal State Funds	219.2	240.9	272.4	314.3	343.1	408.0	449.5	13.3	14.2	15.3	16.3	17.5	18.8	20.1	21.5	23.0	24.7
Federal																	
Section 9	20.9	20.6	17.9	18.6	18.4	18.1	18.0	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
Subtotal Federal Funds	20.9	20.6	17.9	18.6	18.4	18.1	18.0	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
Total Sources of Funds	470.8	495.7	535.3	575.9	629.6	688.5	740.5	313.5	324.5	336.1	348.3	361.0	374.3	388.4	403.1	418.6	434.9
Use of Funds																	
Operating Expenses																	
Wages & Fringe	245.1	261.9	277.6	304.0	322.0	343.1	352.9	356.9	376.7	397.6	419.7	443.0	467.5	493.5	520.9	549.8	580.3
Materials	50.3	56.6	60.9	59.4	65.5	68.4	69.7	70.3	73.8	77.5	81.4	85.5	89.8	94.4	99.1	104.1	109.3
Fuel	19.0	16.1	17.2	15.5	18.5	20.0	19.6	19.3	19.4	19.6	19.7	19.9	20.1	20.2	20.4	20.5	20.7
Commuter Rail Subsidy	53.0	54.3	57.2	50.5	55.2	59.8	61.7	60.0	61.2	62.5	63.7	65.0	66.3	67.7	69.0	70.4	71.8
Other Operating Expenses	12.2	15.1	19.3	26.8	26.0	27.6	28.4	29.6	33.9	38.7	44.3	50.6	57.9	66.2	75.8	86.6	99.1
Subtotal Operating Expenses	379.6	403.9	432.1	456.2	487.4	519.1	532.3	536.1	565.1	595.9	628.9	664.0	701.7	741.9	785.1	831.4	881.2
Interest on Unfunded Debt	13.3	8.5	11.1	14.7	18.6	20.5	19.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Existing Debt Service	77.9	83.3	92.1	104.9	123.7	148.9	188.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lease Payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Use of Funds	470.8	495.7	535.3	575.9	629.6	688.5	740.5	550.1	577.1	607.9	640.9	676.0	713.7	753.9	797.1	843.4	893.2
Net Operating Surplus (Deficit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(236.6)	(252.5)	(271.8)	(292.6)	(315.1)	(339.3)	(365.6)	(394.0)	(424.8)	(458.3)
Cumulative Operating Surplus (Deficit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(236.6)	(489.1)	(760.9)	(1,053.5)	(1,368.6)	(1,707.9)	(2,073.5)	(2,467.5)	(2,892.3)	(3,350.7
Transfers To Capital Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MBTA Cash Flow Summary

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Baseline Scenario Assumptions

1 Capital Spending projection is in constant (FY 92) dollars

2 MITA refunds all long term debt in FY 93, MBTA goes to "forward funding" in FY 93

	Historical Data						Projected Data										
	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
CAPITAL PROGRAM (All Projects)																	
Source of Funds																	
Transfer from Operations																	
Local																	
.																	
.																	
Subtotal Local Funds							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0
State																	
.																	
.																	
Subtotal State Funds							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Federal																	
Committed							105.9	117.4	123.1	24.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Section 3							0.0	26.5	48.9	79.6	106.2	152.4	117.3	117.1	50.2	0.0	0 0
New Section 9							3.5	17.5	31.5	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Section 23 (remainder)							0.0	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0
Subtotal Federal Funds							109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0	35.0
Proceeds from Financing																	
Total Source of Funds							109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0	35 0
Use of Funds																	
Committed Projects							362.9	277.1	218.3	39.6	0.0	0.0	0.0	0.0	0.0	0.0	0 0
1 Five Year Plan Recapitalization							0 0	131.6	165.7	194.8	246.0	104.2	0.0	0.0	0.0	0 0	0 0
Recapitalization Estimate							0 0	0 0	0 0	15.3	33.1	258.1	300.6	269.2	269.2	272 8	240.3
2 Regulatory							0.0	53.9	140.4	146.9	68.6	44.1	35 8	41.3	44.0	52 3	22 0
3 Enhancements							0 0	70.4	122.5	139.7	127.0	140.5	188.6	101.5	0.0	0.0	0 0
4 Expansion							0.0	103.6	237.0	386.8	550.3	616.5	569.8	548.7	430.4	351 1	413 1
Total Use of Funds							362.9	636.6	883.9	923.1	1,025.0	1,163.4	1,094.8	960.5	743.5	676.1	675 4
Net Capital Surplus (Deficit)							(253 5)	(471.8)	(677 0)	(783 9)	(883 8)	(976 1)	(942 5)	(808 4)	(658 4)	(641 1)	(640 4
Cumulative Capital Surplus (Deficit)							(253 5)	(725 3)	(1,402 3)	(2,186.2)	(3,070 0)	(4,046 1)	(4,988 6)	(5,797 0)	(6,455 4)	(7,096 5)	(7,736 8
Net Combined Surplus (Deficit)																	
Cumulative Combined Surplus (Deficit)																	

MBTA Cash Flow Summary

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Baseline Scenario Assumptions

1 Capital Spending projection is in constant (FY 92) dollars

2 MBTA refunds all long term debt in FY 93, MBTA goes to "forward funding" in FY 93

	Historical Data						Projected Data										
	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
CAPITAL PROGRAM (Base Case)																	
Source of Funds																	
State																	
Bond Funds							253.5	280.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
Subtotal State Funds							253.5	280.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
Federal																	
Committed							105.9	117.4	123.1	24.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Section 3							0.0	26.5	48.9	79.6	106.2	152.4	117.3	117.1	50.2	0.0	0.0
New Section 9							3.5	17.5	31.5	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Section 23 (remainder)							0.0	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Federal Funds							109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0	35.0
Proceeds from Financing																	
Total Source of Funds							362.9	444.8	506.9	439.2	441.2	487.4	452.3	452.1	385.2	335.0	335.0
Use of Funds																	
Committed Projects							362.9	277.1	218.3	39.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1 Five Year Plan Recapitalization							0.0	131.6	165.7	194.8	246.0	104.2	0.0	0.0	0.0	0.0	0.0
Recapitalization Estimate							0.0	0.0	0.0	15.3	33.1	258.1	300.6	269.2	269.2	272.8	240.3
2 Regulatory							0.0	53.9	140.4	146.9	68.6	44.1	35.8	41.3	44.0	52.3	22.0
3 Enhancements (SIP only)							0.0	40.1	81.7	96.0	79.3	85.6	121.3	67.8	0.0	0.0	0.0
4 Expansion (SIP only)							0.0	78.7	181.5	292.8	445.0	544.6	508.8	464.7	388.4	351.1	413.1
Total Use of Funds							362.9	581.3	787.5	785.3	872.1	1,036.6	966.5	842.9	701.5	676.1	675.4
Net Capital Surplus (Deficit)							0.0	(136.5)	(280.7)	(346.1)	(430.9)	(549.2)	(514.2)	(390.8)	(316.4)	(341.1)	(340.4
Cumulative Capital Surplus (Deficit)							0.0	(136.5)	(417.2)	(763.3)	(1,194.2)	(1,743.4)	(2,257.7)	(2,648.4)	(2,964.8)	(3,305.9)	(3,646.2
Net Combined Surplus (Deficit)																	
Cumulative Combined Surplus (Deficit)																	

MBTA Capital Program

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Sources: J. Scanlin, P. Butler
Note: Spending includes Federal reimbursement

(1992 $ in Millions) Project Name	ID #	Cate-gory	Total Cost	Proj Start Date (FY)	Duration (Yrs)	Cost Remaining	Years Remaining	Curve Code
COMMITTED SPENDING								
FIVE YEAR PLAN PROJECTS								
Commuter Rail Track/Signals/Bridges	1	1	159.0	1993	5	159.0	5	5
Boston Engine Terminal	2	1	250.0	1993	5	239.3	5	15
Fare Collection Equipment	3	1	102.0	1993	5	102.0	5	15
Red Line Bridge/Signals	4	1	14.0	1993	4	14.0	4	4
New Police Station	5	1	10.0	1993	2	10.0	2	2
Bus Procurement	6	1	25.0	Yrly (thru 96)	5	100.0	4	NA
Bus Rehabilitation	7	1	8	Yrly (thru 96)	5	32.0	4	NA
RIDE Van Procurement	8	1	1.0	Yrly (thru 96)	5	4.0	4	NA
Bus Maintenance Facility Renovations	9	1	7.5	1993	5	7.5	5	5
Blue Line Track/Vents/Power	10	1	38.5	1993	5	38.5	5	5
Green Line Power/Track/Ventilation	11	1	60.0	1993	5	60.0	5	5
Info System Svcs Program	12	1	5.0	Yrly (thru 96)	5	20.0	4	NA
Non-Revenue Equipment	13	1	10.0	Yrly (thru 96)	5	40.0	4	NA
Power/Communications	14	1	4.0	Yrly (thru 96)	5	16.0	4	NA
CATEGORY 1 SUBTOTAL			694.0			842.3		
Green Line Station Access	15	2	276.1	1993	10	275.0	10	20
Green Line Vehicle Procurement	16	2	270.0	1993	4	270.0	4	14
Orange Line Access	17	2	34.9	1993	5	34.9	5	5
Red Line Access	18	2	35.6	1993	5	35.6	5	5
Red Line Maintenance Facilities Rehab	19	2	5.7	1993	5	5.7	5	5
Red Line Parking Garage Rehab	20	2	6.8	1993	2	6.0	2	2
Commuter Rail Access	21	2	7.0	1993	5	7.0	5	5
South Boston Power Plant	22	2	3.0	1993	2	3.0	2	2
Environmental Projects	23	2	3.0	Yrly (thru 96)	5	12.0	4	NA
CATEGORY 2 SUBTOTAL			642.1			649.2		
North Station Transportation Center	24	3	350.0	1993	7	224.4	7	17
South Station Bus Terminal/Track 12*	25	3	121.1	1993	4	115.0	4	14
Blue Line Station Mod/Access*	26	3	373.8	1993	7	356.7	7	17
Central Materials Warehouse	27	3	12.0	1993	2	12.0	2	2
Red Line Maintenance Facilities Exp	28	3	20.0	1993	5	20.0	5	5
Orient Heights Maintenance Facility	29	3	20.0	1993	4	20.0	4	14
Red Line Vent Shafts	30	3	39.4	1993	5	30.0	5	5
Parking/Station Improvements (CR/RT)*	31	3	268.0	1993	7	100.0	7	7
Commuter Boat Terminals	32	3	4.0	1993	3	4.0	3	3
Mini Station Mod Program	33	3	2.0	Yrly (thru 96)	5	8.0	4	NA
CATEGORY 3 SUBTOTAL			1,210.3			890.1		
CATEGORY 3 SIP Commitments Subtotal			762.9			571.7		
Old Colony*	34	4	560.0	1993	6	545.0	6	16
South Boston Transitway*	35	4	522.8	1993	8	512.4	8	18
Worcester CR Extension*	36	4	80.0	1993	5	80.0	5	15
New Bedford/Fall River CR Extension	37	4	280.0	1994	7	280.0	7	17
Foxboro CR Extension	38	4	10.0	1994	3	10.0	3	3
Saxonville CR Extension	39	4	25.0	1994	5	25.0	5	5
Milford/Bellingham CR Extension	40	4	30.0	1993	4	30.0	4	4
Newburyport Restoration*	41	4	36.6	1993	4	36.6	4	4
Arborway Restoration	42	4	14.0	1993	4	14.0	4	4
Green Line Extension/Lechmere Station*	43	4	150.0	1994	6	150.0	6	16
Washington St. Replacement*	44	4	121.1	1994	6	120.0	6	16
Arborway Maintenance Facility	45	4	110.0	1994	4	110.0	4	14
Blue Line Fleet Expansion	46	4	69.7	1993	5	69.7	5	5
Orange Line Fleet Expansion*	47	4	114.5	1993	5	114.5	5	5
Red Line Fleet Expansion*	48	4	119.0	1994	5	119.0	5	5
Circumferential Biomedical Line*	49	4	2,000.0	1994	10	2,000.0	10	20
Blue/Red Connector*	50	4	207.0	1995	10	207.0	10	20
CATEGORY 4 SUBTOTAL			4,449.7			4,423.2		
CATEGORY 4 SIP Commitments Subtotal			3,911.0			3,884.5		
GRAND TOTAL CAPITAL SPENDING			6,996.1			6,804.8		

*SIP Commitments for CA/THT

MBTA Capital Program

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(1992 $ in Millions)		Projected Total Spending									
Project Name	**ID #**	**FY 92**	**FY 93**	**FY 94**	**FY 95**	**FY 96**	**FY 97**	**FY 98**	**FY 99**	**FY 00**	**FY 01**
COMMITTED SPENDING		362.9	277.1	218.3	39.6	0.0	0.0	0.0	0.0	0.0	0.0
FIVE YEAR PLAN PROJECTS											
Commuter Rail Track/Signals/Bridges	1		31.8	31.8	31.8	31.8	31.8	0.0	0.0	0.0	0.0
Boston Engine Terminal	2		12.0	35.9	59.8	95.7	35.9	0.0	0.0	0.0	0.0
Fare Collection Equipment	3		5.1	15.3	25.5	40.8	15.3	0.0	0.0	0.0	0.0
Red Line Bridge/Signals	4		3.5	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0
New Police Station	5		5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Procurement	6		25.0	25.0	25.0	25.0	0.0	0.0	0.0	0.0	0.0
Bus Rehabilitation	7		8.0	8.0	8.0	8.0	0.0	0.0	0.0	0.0	0.0
RIDE Van Procurement	8		1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
Bus Maintenance Facility Renovations	9		1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0
Blue Line Track/Vents/Power	10		7.7	7.7	7.7	7.7	7.7	0.0	0.0	0.0	0.0
Green Line Power/Track/Ventilation	11		12.0	12.0	12.0	12.0	12.0	0.0	0.0	0.0	0.0
Info System Svcs Program	12		5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0
Non-Revenue Equipment	13		10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0
Power/Communications	14		4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 1 SUBTOTAL			131.6	165.7	194.8	246.0	104.2	0.0	0.0	0.0	0.0
Green Line Station Access	15		2.8	8.3	19.3	22.0	27.5	35.8	41.3	44.0	52.3
Green Line Vehicle Procurement	16		27.0	108.0	108.0	27.0	0.0	0.0	0.0	0.0	0.0
Orange Line Access	17		7.0	7.0	7.0	7.0	7.0	0.0	0.0	0.0	0.0
Red Line Access	18		7.1	7.1	7.1	7.1	7.1	0.0	0.0	0.0	0.0
Red Line Maintenance Facilities Rehab	19		1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0
Red Line Parking Garage Rehab	20		3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commuter Rail Access	21		1.4	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0
South Boston Power Plant	22		1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental Projects	23		3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 2 SUBTOTAL			53.9	140.4	146.9	68.6	44.1	35.8	41.3	44.0	52.3
North Station Transportation Center	24		9.0	13.5	22.4	33.7	44.9	67.3	33.7	0.0	0.0
South Station Bus Terminal/Track 12*	25		11.5	46.0	46.0	11.5	0.0	0.0	0.0	0.0	0.0
Blue Line Station Mod/Access*	26		14.3	21.4	35.7	53.5	71.3	107.0	53.5	0.0	0.0
Central Materials Warehouse	27		6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Maintenance Facilities Exp	28		4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0
Orient Heights Maintenance Facility	29		2.0	8.0	8.0	2.0	0.0	0.0	0.0	0.0	0.0
Red Line Vent Shafts	30		6.0	6.0	6.0	6.0	6.0	0.0	0.0	0.0	0.0
Parking/Station Improvements (CR/RT)*	31		14.3	14.3	14.3	14.3	14.3	14.3	14.3	0.0	0.0
Commuter Boat Terminals	32		1.4	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Mini Station Mod Program	33		2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 3 SUBTOTAL			70.4	122.5	139.7	127.0	140.5	188.6	101.5	0.0	0.0
CATEGORY 3 SIP Commitments Subtotal			40.1	81.7	96.0	79.3	85.6	121.3	67.8	0.0	0.0
Old Colony*	34		27.3	54.5	81.8	109.0	190.8	81.8	0.0	0.0	0.0
South Boston Transitway*	35		15.4	25.6	46.1	61.5	66.6	92.2	143.5	61.5	0.0
Worcester CR Extension*	36		4.0	12.0	20.0	32.0	12.0	0.0	0.0	0.0	0.0
New Bedford/Fall River CR Extension	37		0.0	11.2	16.8	28.0	42.0	56.0	84.0	42.0	0.0
Foxboro CR Extension	38		0.0	3.4	3.3	3.3	0.0	0.0	0.0	0.0	0.0
Saxonville CR Extension	39		0.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0
Milford/Bellingham CR Extension	40		7.5	7.5	7.5	7.5	0.0	0.0	0.0	0.0	0.0
Newburyport Restoration*	41		9.2	9.2	9.2	9.2	0.0	0.0	0.0	0.0	0.0
Arborway Restoration	42		3.5	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0
Green Line Extension/Lechmere Station*	43		0.0	7.5	15.0	22.5	30.0	52.5	22.5	0.0	0.0
Washington St. Replacement*	44		0.0	6.0	12.0	18.0	24.0	42.0	18.0	0.0	0.0
Arborway Maintenance Facility	45		0.0	11.0	44.0	44.0	11.0	0.0	0.0	0.0	0.0
Blue Line Fleet Expansion	46		13.9	13.9	13.9	13.9	13.9	0.0	0.0	0.0	0.0
Orange Line Fleet Expansion*	47		22.9	22.9	22.9	22.9	22.9	0.0	0.0	0.0	0.0
Red Line Fleet Expansion*	48		0.0	23.8	23.8	23.8	23.8	23.8	0.0	0.0	0.0
Circumferential Biomedical Line*	49		0.0	20.0	60.0	140.0	160.0	200.0	260.0	300.0	320.0
Blue/Red Connector*	50		0.0	0.0	2.1	6.2	14.5	16.6	20.7	26.9	31.1
CATEGORY 4 SUBTOTAL			103.6	237.0	386.8	550.3	616.5	569.8	548.7	430.4	351.1
CATEGORY 4 SIP Commitments Subtotal			78.7	181.5	292.8	445.0	544.6	508.8	464.7	388.4	351.1
GRAND TOTAL CAPITAL SPENDING		362.9	636.6	883.9	907.9	991.9	905.3	794.2	691.4	474.4	403.3

*SIP Commitments for CA/THT

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(1992 $ in Millions) **Project Name**	ID #	Projected Total Spending FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
COMMITTED SPENDING		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FIVE YEAR PLAN PROJECTS											
Commuter Rail Track/Signals/Bridges	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Boston Engine Terminal	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fare Collection Equipment	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Bridge/Signals	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Police Station	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Procurement	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Rehabilitation	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RIDE Van Procurement	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Maintenance Facility Renovations	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue Line Track/Vents/Power	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Line Power/Track/Ventilation	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Info System Svcs Program	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Revenue Equipment	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Power/Communications	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 1 SUBTOTAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Line Station Access	15	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Line Vehicle Procurement	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Orange Line Access	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Access	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Maintenance Facilities Rehab	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Parking Garage Rehab	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commuter Rail Access	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Boston Power Plant	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental Projects	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 2 SUBTOTAL		22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Station Transportation Center	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Station Bus Terminal/Track 12*	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue Line Station Mod/Access*	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central Materials Warehouse	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Maintenance Facilities Exp	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Orient Heights Maintenance Facility	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Vent Shafts	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Parking/Station Improvements (CR/RT)*	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commuter Boat Terminals	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mini Station Mod Program	33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 3 SUBTOTAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 3 SIP Commitments Subtotal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Colony*	34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Boston Transitway*	35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Worcester CR Extension*	36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Bedford/Fall River CR Extension	37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foxboro CR Extension	38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saxonville CR Extension	39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Milford/Bellingham CR Extension	40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Newburyport Restoration*	41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arborway Restoration	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Line Extension/Lechmere Station*	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Washington St. Replacement*	44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arborway Maintenance Facility	45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue Line Fleet Expansion	46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Orange Line Fleet Expansion*	47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Line Fleet Expansion*	48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Circumferential Biomedical Line*	49	380.0	160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue/Red Connector*	50	33.1	39.3	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 4 SUBTOTAL		413.1	199.3	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CATEGORY 4 SIP Commitments Subtotal		413.1	199.3	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRAND TOTAL CAPITAL SPENDING		435.1	199.3	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*SIP Commitments for CA/THT

MBTA Capital Reimbursement

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Sources: J. Scanlin, P. Butler

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(1992 $ in Millions) Program/Project Name	ID #	Total Cost	Fed Funding Level (%)	Federal Share	Start Date	Reimbursement Remaining	Years Remaining	Curve Code
FEDERAL:								
Committed Spending								
Section 9 (Capital)								
1992 application					1992	35.0	4	14
1993 application					1993	35.0	4	14
1994 application					1994	35.0	4	14
1995 application					1995	35.0	4	14
1996 application					1996	35.0	4	14
1997 application					1997	35.0	4	14
1998 application					1998	35.0	4	14
1999 application					1999	35.0	4	14
2000 application					2000	35.0	4	14
2001 application					2001	35.0	4	14
2002 application					2002	35.0	4	14
2003 application					2003	35.0	4	14
2004 application					2004	35.0	4	14
2005 application					2005	35.0	4	14
2006 application					2006	35.0	4	14
2007 application					2007	35.0	4	14
2008 application					2008	35.0	4	14
2009 application					2009	35.0	4	14
2010 application					2010	35.0	4	14
2011 application					2011	35.0	4	14
2012 application					2012	35.0	4	14
Section 9 (Capital) Subtotal						735.0		
Section 23 remainder					1993	6.7	2	2
Old Colony	34	560.0	50%	280.0	1993	280.0	6	16
South Boston Transitway	35	522.8	80%	418.2	1993	418.2	8	18
Section 3 Subtotal				698.2		698.2		
FEDERAL SUBTOTAL						1,439.9		
GRAND TOTAL						1,439.9		

MBTA Capital Reimbursement

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(1992 $ in Millions) Program/Project Name	ID #	Projected Reimbursement FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
FEDERAL:											
Committed Spending		105.9	117.4	123.1	24.6	0.0	0.0	0.0	0.0	0.0	0.0
Section 9 (Capital)											
1992 application		3.5	14.0	14.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
1993 application		0.0	3.5	14.0	14.0	3.5	0.0	0.0	0.0	0.0	0.0
1994 application		0.0	0.0	3.5	14.0	14.0	3.5	0.0	0.0	0.0	0.0
1995 application		0.0	0.0	0.0	3.5	14.0	14.0	3.5	0.0	0.0	0.0
1996 application		0.0	0.0	0.0	0.0	3.5	14.0	14.0	3.5	0.0	0.0
1997 application		0.0	0.0	0.0	0.0	0.0	3.5	14.0	14.0	3.5	0.0
1998 application		0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.0	14.0	3.5
1999 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.0	14.0
2000 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.0
2001 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
2002 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2005 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2008 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 9 (Capital) Subtotal		3.5	17.5	31.5	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Section 23 remainder		0.0	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Colony	34	0.0	14.0	28.0	42.0	56.0	98.0	42.0	0.0	0.0	0.0
South Boston Transitway	35	0.0	12.5	20.9	37.6	50.2	54.4	75.3	117.1	50.2	0.0
Section 3 Subtotal		0.0	26.5	48.9	79.6	106.2	152.4	117.3	117.1	50.2	0.0
FEDERAL SUBTOTAL		109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0
GRAND TOTAL		109.4	164.8	206.9	139.2	141.2	187.4	152.3	152.1	85.2	35.0

MBTA Capital Reimbursement

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(1992 $ in Millions)		Projected Reimbursement									
Program/Project Name	**ID #**	**FY 02**	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**FY 07**	**FY 08**	**FY 09**	**FY 10**	**FY 11**
FEDERAL:											
Committed Spending		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 9 (Capital)											
1992 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1995 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999 application		3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000 application		14.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001 application		14.0	14.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002 application		3.5	14.0	14.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
2003 application		0.0	3.5	14.0	14.0	3.5	0.0	0.0	0.0	0.0	0.0
2004 application		0.0	0.0	3.5	14.0	14.0	3.5	0.0	0.0	0.0	0.0
2005 application		0.0	0.0	0.0	3.5	14.0	14.0	3.5	0.0	0.0	0.0
2006 application		0.0	0.0	0.0	0.0	3.5	14.0	14.0	3.5	0.0	0.0
2007 application		0.0	0.0	0.0	0.0	0.0	3.5	14.0	14.0	3.5	0.0
2008 application		0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.0	14.0	3.5
2009 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.0	14.0
2010 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	14.0
2011 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
2012 application		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 9 (Capital) Subtotal		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Section 23 remainder		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Old Colony	34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Boston Transitway	35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 3 Subtotal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FEDERAL SUBTOTAL		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
GRAND TOTAL		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0

MBTA Recapitalization Estimate

Sources: T. Furmaniak, B. Kuo, J. Scanlin, J. Monahan, P. Butler

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(1992 Dollars in Millions) Program/Project Name	Repl Cost	Repl Date	Repl Duration	Curve Code	Overhaul Cost	Overhaul Date	Overhaul Duration	Curve Code
VEHICLE RECAP								
Red Line (delivery date):								
86 car fleet (1994)	146.2	2019	5	15	73.1	2007	2	2
74 car fleet (1970)	125.8	1995	5	15	62.9	2008	2	2
58 car fleet (1989)	98.6	2014	5	15	49.3	2004	2	2
Orange Line (delivery date):								
120 car fleet (1980)	180.0	2005	5	15	90.0	1995	10	10
Blue Line (delivery date):								
70 car fleet (1981)	105.0	2006	5	15	52.5	1996	10	10
Green Line (delivery date):								
100 car fleet (1987)	170.0	2012	5	15	85.0	2000	2	2
100 car fleet (1995)	170.0	2020	5	15	85.0	2008	2	2
Commuter Rail (delivery date):								
18 locomotives (1978)	39.6	2008	3	13	19.8	1998	2	2
25 locomotives (1988)	55.0	2018	3	13	27.5	'98,'08	2	2
9 remfad locomotives (1991)	14.4	2011	2	12	7.2	2001	2	2
57 coaches (1978)	57.0	2003	4	14	DONE	DONE	DONE	DONE
67 coaches (1988)	67.0	2013	4	14	33.5	2003	2	2
40 coaches (1987)	40.0	2012	3	13	20.0	2002	2	2
107 coaches (1990)	107.0	2015	5	15	53.5	2005	2	2
75 double-deck coaches (1991)	105.0	2016	5	15	52.5	2006	2	2
Non-revenue light/heavy rail	3.0	Yrly						
Buses	25.0	Yrly						
Non-revenue vehicles	3.0	Yrly						
RIDE vans	1.0	Yrly						
VEHICLE SUBTOTAL	1,512.6				711.8			
EXISTING PLANT RECAP								
TRACK AND POWER	38.9	Yrly						
TUNNELS, VIADUCTS, BRIDGES	28.7	Yrly						
STATIONS AND PARKING	45.4	Yrly						
SIGNALS/COMMUNICATIONS	36.6	Yrly						
GARAGE/CARHOUSES	17.5	Yrly						
EQUIPMENT (less fare collection)	7.8	Yrly						
FARE COLLECTION EQUIPMENT	0.6	Yrly						
BUILDINGS	4.9	Yrly						
EXISTING PLANT SUBTOTAL	180.4							
NEW PLANT RECAP								
NEW PLANT SUBTOTAL								
GRAND TOTAL	1,693.0							

Note 1: Existing plant=built prior to FY 92. New plant=built during or after FY 92
Note 2: Boeing-Vertol Fleet excluded due to imminent replacement

MBTA Recapitalization Estimate

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(1992 Dollars in Millions) Program/Project Name	Projected Recapitalization Spending FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
VEHICLE RECAP										
Red Line (delivery date):										
86 car fleet (1994)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74 car fleet (1970)	0.0	0.0	0.0	6.3	18.9	31.5	50.3	18.9	0.0	0.0
58 car fleet (1989)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Orange Line (delivery date):										
120 car fleet (1980)	0.0	0.0	0.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Blue Line (delivery date):										
70 car fleet (1981)	0.0	0.0	0.0	0.0	5.3	5.3	5.3	5.3	5.3	5.3
Green Line (delivery date):										
100 car fleet (1987)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5	42.5
100 car fleet (1995)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commuter Rail (delivery date):										
18 locomotives (1978)	0.0	0.0	0.0	0.0	0.0	0.0	9.9	9.9	0.0	0.0
25 locomotives (1988)	0.0	0.0	0.0	0.0	0.0	0.0	13.8	13.8	0.0	0.0
9 remfad locomotives (1991)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
57 coaches (1978)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67 coaches (1988)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 coaches (1987)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107 coaches (1990)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75 double-deck coaches (1991)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-revenue light/heavy rail	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
Buses	0.0	0.0	0.0	0.0	0.0	25.0	25.0	25.0	25.0	25.0
Non-revenue vehicles	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
RIDE vans	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
VEHICLE SUBTOTAL	0.0	0.0	0.0	15.3	33.1	77.7	120.2	88.8	88.8	92.4
EXISTING PLANT RECAP										
TRACK AND POWER	0.0	0.0	0.0	0.0	0.0	38.9	38.9	38.9	38.9	38.9
TUNNELS, VIADUCTS, BRIDGES	0.0	0.0	0.0	0.0	0.0	28.7	28.7	28.7	28.7	28.7
STATIONS AND PARKING	0.0	0.0	0.0	0.0	0.0	45.4	45.4	45.4	45.4	45.4
SIGNALS/COMMUNICATIONS	0.0	0.0	0.0	0.0	0.0	36.6	36.6	36.6	36.6	36.6
GARAGE/CARHOUSES	0.0	0.0	0.0	0.0	0.0	17.5	17.5	17.5	17.5	17.5
EQUIPMENT (less fare collection)	0.0	0.0	0.0	0.0	0.0	7.8	7.8	7.8	7.8	7.8
FARE COLLECTION EQUIPMENT	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6
BUILDINGS	0.0	0.0	0.0	0.0	0.0	4.9	4.9	4.9	4.9	4.9
EXISTING PLANT SUBTOTAL	0.0	0.0	0.0	0.0	0.0	180.4	180.4	180.4	180.4	180.4
NEW PLANT RECAP										
NEW PLANT SUBTOTAL										
GRAND TOTAL	0.0	0.0	0.0	15.3	33.1	258.1	300.6	269.2	269.2	272.8

MBTA Recapitalization Estimate

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(1992 Dollars in Millions) Program/Project Name	Projected Recapitalization Spending FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
VEHICLE RECAP										
Red Line (delivery date):										
86 car fleet (1994)	0.0	0.0	0.0	0.0	0.0	36.6	36.6	0.0	0.0	0.0
74 car fleet (1970)	0.0	0.0	0.0	0.0	0.0	0.0	31.5	31.5	0.0	0.0
58 car fleet (1989)	0.0	0.0	24.7	24.7	0.0	0.0	0.0	0.0	0.0	0.0
Orange Line (delivery date):										
120 car fleet (1980)	9.0	9.0	9.0	9.0	27.0	45.0	72.0	27.0	0.0	0.0
Blue Line (delivery date):										
70 car fleet (1981)	5.3	5.3	5.3	5.3	5.3	15.8	26.3	42.0	15.8	0.0
Green Line (delivery date):										
100 car fleet (1987)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100 car fleet (1995)	0.0	0.0	0.0	0.0	0.0	0.0	42.5	42.5	0.0	0.0
Commuter Rail (delivery date):										
18 locomotives (1978)	0.0	0.0	0.0	0.0	0.0	0.0	13.5	13.1	13.1	0.0
25 locomotives (1988)	0.0	0.0	0.0	0.0	0.0	0.0	13.8	13.8	0.0	0.0
9 remfad locomotives (1991)	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
57 coaches (1978)	0.0	5.7	22.8	22.8	5.7	0.0	0.0	0.0	0.0	0.0
67 coaches (1988)	0.0	16.8	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 coaches (1987)	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107 coaches (1990)	0.0	0.0	0.0	26.8	26.8	0.0	0.0	0.0	0.0	0.0
75 double-deck coaches (1991)	0.0	0.0	0.0	0.0	26.3	26.3	0.0	0.0	0.0	0.0
Non-revenue light/heavy rail	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Buses	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Non-revenue vehicles	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
RIDE vans	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
VEHICLE SUBTOTAL	59.9	78.7	110.5	120.5	123.0	155.6	268.0	201.8	60.8	39.2
EXISTING PLANT RECAP										
TRACK AND POWER	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9
TUNNELS, VIADUCTS, BRIDGES	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
STATIONS AND PARKING	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
SIGNALS/COMMUNICATIONS	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
GARAGE/CARHOUSES	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
EQUIPMENT (less fare collection)	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
FARE COLLECTION EQUIPMENT	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
BUILDINGS	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
EXISTING PLANT SUBTOTAL	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4
NEW PLANT RECAP										
NEW PLANT SUBTOTAL										
GRAND TOTAL	240.3	259.1	290.9	300.9	303.4	336.0	448.4	382.2	241.2	219.6

ACME
BOOKBINDING CO., INC.

APR 28 1993

100 CAMBRIDGE STREET
CHARLESTOWN, MASS